Malaviya National Institute of Technology Jaipur JLN Marg, Jaipur-302 017

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Email: director@mnit.ac.in



मालवीय राष्ट्रीय प्रौद्योगिकी संस्थान जयपुर Malaviya National Institute of Technology Jaipur

# **Institute History**

The Institute was jointly established in 1963 as Malaviya Regional Engineering College Jaipur by the Government of India and the Government of Rajasthan. Subsequently, on 26 June, 2002, the college was given the status of National Institute of Technology. On 15 August 2007, it was recognized as the Institute of National Importance through an Act of Parliament. The Institute is fully funded by the Ministry of Education (Shiksha Mantralaya), Government of India.

# **Campus Introduction**

The Institute lies in the heart of the pink city, imaginatively laid out with a picturesque landscape of 317 acres. It presents a spectacle of harmony in modern architecture and natural beauty. The campus is located in close proximity of Jaipur airport, railway station, major hospitals, and shopping malls. It consists of academic and administrative buildings, hostels, and on-campus accommodation for faculty and staff. The campus provides all essential amenities for community living like staff club, primary health center (dispensary), bank, post office, shopping complex, gymnasium, playing fields, guest houses, and canteen.

## **About Jaipur**

Jaipur, the capital of Rajasthan, is a beautiful and historical city that attracts tourists worldwide. It is popularly known as the Pink City because of the exclusive pink stones used for building the monuments. Jaipur's bazaars are famous for their embroidered leather shoes, blue pottery, jewellery, clothes, and exotic wares. Western Rajasthan forms a convenient circuit in the heart of the Thar desert, which has shaped its history, lifestyle, and architecture. The city's major tourist

attractions include Jantar Mantar, Amber Fort, Moti Doongari and Lakshmi Narayan Temple, City

Palace, Albert Hall (Museum), Hawa Mahal, Jaigarh Fort, Sisodia Rani Garden.

**Vision Statement** 

To create a centre for imparting technical education of international standards and conduct research at the cutting edge of technology to meet the current and future challenges of

technological development.

**Mission Statement** 

To create technical manpower for meeting the current and future demands of industry: To recognize education and research in close interaction with industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the Institute with sensitivity

to social development and eye for opportunities for growth in the international perspective.

**Key Objective** 

MNIT shall strive to impart knowledge in such a manner as to achieve total satisfaction of students,

parents, employers, and the society.

**Institute Motto** 

योग: कर्मस् कौशलम

Strategic Plan

**EXECUTIVE SUMMARY MNIT** Jaipur has developed a strategic plan for 2022-27 with aspirations to transform into a world-class higher education institution. In order to fulfil its aspirations to become a leading seat of learning and research, MNIT Jaipur has put forth an ambitious strategic plan based on unambiguously

defined performance indicators related to various aspects of its operations. The committee constituted for

developing the Strategic Plan for a period 2022-27 has, through a consultative mechanism identified thrust

areas and other priority areas for the Institute where a focused effort to improve things are likely to give an

impetus to the Institute in terms of its reputation, ranking, financial sustainability and stakeholder satisfaction.

The committee has followed an eight-step approach for the development, involving students, faculty, alumni and industry. Face to face meetings, open houses, online surveys and telephonic consultations have been used to identify thoughts and ideas for the purpose. The Strategic Plan document for period 2017-22 was also referred for identifying areas where continuity of efforts is needed. Strength, Weakness, Opportunity and Challenge (SWOC) analysis was also carried out by the committee in this process. The plan and identified priority action items are classified under three major areas, termed as Action Groups in this document. These are: Firstly, 'Governance, Budgeting & Infrastructure'; Secondly, 'Research Excellence', and last but not the least 'Teaching-Learning'. After identifying priority action items under each of these three Action groups and defining their respective Key Performance Indicators (KPIs), the committee once again consulted departments and other units of the Institute for finalizing the Key Performance Indicators and setting up tangible targets in various priority areas so that progress of the Institute can be established in a quantifiable manner. Post setting up the target KPIs, the committee has also prepared implementation plan for achieving the targets. Three Deans, namely, Dean-P&D, Dean R&C, and Dean-AA have been identified as key responsible persons for monitoring the progress of the Action Groups: 'Governance, Budgeting & Infrastructure'; Secondly, 'Research Excellence', and last but not the least 'Teaching-Learning', respectively. Under each Action Group, focused Task Groups, comprising three Senior Institute functionaries have been identified who hold the key for implementation of individual action point and KPI improvement. The document also spells out an overall monitoring mechanism through a committee headed by the Director himself and recommends that progress be presented to the BoG on half yearly basis. Though individual targets for various KPIs vary over a wide range, it is envisaged that if the plan is fully implemented in letter and spirit, the Institute is likely to grow by 2.5 times as compared to where it stands now in the year 2021-22, through a path of implementing many recommendations of NEP-2020, including better employability of its students, offering education to wider audience through digitization, enhanced industry connect, international visibility and ranking.

#### **CORE INSTITUTE GOALS & VALUES**

Currently the institutional goals of MNIT Jaipur are defined as:

- 1. Enhanced value to students
- 2. Enhanced value to industry
- 3. Enhanced value to society
- 4. Efficient and transparent organizational management
- 5. Enhanced self-dependence

# 6. Enhanced global recognition

MNIT Jaipur has identified the following as its core institutional values:

- Excellence
- Inclusiveness
- Innovation
- Integrity
- Reliability
- Social responsibility
- Accountability
- Transparency

#### **SETTING STRATEGIC PLAN 2027**

# THE CONTEXT

Higher education is currently undergoing a paradigm shift globally. Increasing use of digital technologies, shrinking distances and an explosion of information is changing the fundamental nature of how we are living our lives. These transformations necessitate that the seats of learning too adapt and adopt to these transformations. India now aspires to take a leadership position globally. To achieve these aspirations, the Institute need to transform huge young population into a multidisciplinary skilled workforce. This would mean transforming delivery of education to industry-oriented and practice-based content that shapes teaching-learning experiences. With the adoption of the National Education Policy (NEP) 2020, a new era has dawned in the Indian education landscape. The reforms proposed in the NEP 2020 will lead to fundamental changes the manner the seats of learning in Indian Education System operates. MNIT Jaipur aspires to take a leadership position in building capacities and frameworks that can benefit not just itself but also by other institutes in higher technical education.

MNIT Jaipur aspires to take a leadership position in adopting and adapting to these digital transformations to create world-class teaching-learning experience. An effort is being made in the

form of developing this strategic plan to transform MNIT Jaipur from a traditional seat of learning

into a modern and global leader in education while showcasing this digital transformation.

The specific objectives for developing the Strategic Plan 2027 are to:

• Develop a set of strategic aspirations for MNIT Jaipur for next 5 years that sets it on a course to

become a leader in Higher Education in India. Define the set of initiatives that will help MNIT Jaipur

in realizing these aspirations by 2027.

Successfully implement the National Education Policy 2020 while assuming a leadership role in

building capabilities and implementation frameworks.

Develop pathways to digitally transform and create world-class teachinglearning experiences

which can benefit MNIT Jaipur as well as the society in general.

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CHARTING THE PATH TO DEVELOP THE STRATEGIC PLAN 2027

In order to develop it strategic plan for the next five years MNIT Jaipur adopted a formal broadbased

consultative approach which included:

Stage 1: Stakeholder Consultation

Leadership of the institute including Director, Deans, Associate Deans, Head of

Departments and Senior Professors

Faculty and staff belonging to the constituent Academic departments, Centre

of Excellences and Administrative sections

• Existing students registered in and Alumni of various programs offered by the

Institute

Industry experts, and current and potential employers

Stage 2: Identification of priority areas based on stakeholder consultation

Stage 3: Conducting a SWOC (Strength Weakness Opportunity Challenges) Analysis

Stage 4: Further refinement of the identified priority areas and development of key

performance indicators (KPIs) and metrics

Stage 5: Identification of benchmarks for the KPIs and major action points

Stage 6: Setting targets for the identified KPIs and metrics vis-à-vis benchmarks

Stage 7: Developing an enabling framework and action plan to achieve identified KPIs and metrics

Stage 8: Developing a mechanism to track and monitor the identified KPIs and metrics

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STAKEHOLDER CONSULTATION

The stakeholder consultations included focused group/ open-house interactions with various stakeholders followed by a structured feedback questionnaire circulated among various

stakeholders to record their responses on various aspects and activities related to MNIT Jaipur.

Responses on the respective structured questionnaires were obtained from:

- Students
- Faculty
- Alumni & Industry

Subjective and objective evaluation was carried out for the feedback received, and the same was also utilized for carrying out Strength Weakness Opportunity and Challenge (SWOC) analysis.

SUMMARY OF SWOC ANALYSIS

Utilizing the stakeholder discussions and surveys, SWOC analysis has been conducted.

Summary emerging out from the stakeholder opinion, is presented below:

Major strengths:

- Classroom infrastructure, excellent location and green campus
- Adequate built-up space and land availability for expansion

- Strong alumni base willing to contribute towards improvement
- Qualified faculty having international experience/exposure/linkages

Major weaknesses:

- Lack of active industry linkage in many departments/programs
- Pending maintenance and upgradation of lab equipment
- Inadequate hostel facilities
- Lack of motivation among faculty and students

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Major opportunities:

- Rapidly expanding industrial base in Rajasthan
- Opportunities to support government initiatives/missions
- Starting interdisciplinary centers of excellence
- Establishing tie-ups with strategic organizations and defense sector

Major challenges:

- Budgetary appropriation and constraints
- Legacy of old procedures
- Lead time for infrastructure expansion limiting academic expansion
- Other institutes in nearby areas capitalizing opportunities and improving ranking

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**IDENTIFIED KEY PRIORITY AREAS** 

Based upon the wide stakeholder consultation, following priority areas were identified. These identified priority areas have been grouped under three heads as per their nature and

involvement of institute authorities, as well as location of action point:

Action Item Group-1: Governance, Budgeting & Infrastructure

Action Item Group-2: Research Excellence

Action Item Group-3: Teaching-Learning

The tables given on the following pages present a detailed coverage of these action groups, along with their KPIs and identified three major action items for each objective. These action items have a significant reflection of the stakeholder consultation alongside directions identified from the study of strategic plans of other premium institutes.

## **IMPLEMENTATION PLAN**

Following basic elements have been identified for implementing the Strategic Plan

STAGE 1

SETTING TARGETS FOR KEY PERFORMANCE INDICATORS

 Through the next round of stakeholder consultation, identified priority areas and identified KPIs were again shared with faculty members and officials of the Institute.

 Inputs were taken from them about their own requirements and targets with reference to current level of operation and keeping in mind institute aspirations.

 Compiling and moderating the inputs received from the departments, centers and other units, Institute level targets were worked out. Summary of the same is presented in the following section

STAGE 2

DEVELOPING ENABLING FRAMEWORK

For implementation of the above identified action points and for achieving the targets for

individual KPIs, key stakeholder in the administrative set-up have been identified. For the three

major action item groups, three Deans would be mainly responsible as given below:

Action Item group-1: Governance, budgeting and infrastructure: Dean (P&D)

Action item group-2: Research excellence: Dean (R&C)

Action item group-3: Teaching-learning: Dean (AA)

Each Action item group has been sub-divided in various task groups, TG1.1 to TG1.11 for the Action

Item Group-1, TG2.1 to TG2.9 for the Action Item Group-2, and TG3.1 to TG3.10 for the

Action Item Group-3.

For each Task Group, three senior functionaries have been identified with their major roles identified

for implementation and attainment of respective KPI.

STAGE 3

TRACKING & MONITORING KEY PERFORMANCE INDICATORS

Monitoring and Reporting Implementation of Strategic Plan 2027

The success in achievement of the various objectives set by this strategic plan hinges on the

successful accomplishment of various performance targets set in it. It is thus imperative that a

continuous monitoring and assessment framework is put into place which will ensure that the

efforts of the Institute are yielding results in the intended direction. Such mechanism is also required

to identify if any deviations and take timely steps to rectify them.

An internal 'Strategic Plan Implementation Monitoring Committee' is being proposed in order to

create a reporting framework and setup requisite mechanisms for the continuous monitoring and

assessment of institutional activities.

**Primary Objective** 

The primary objective of the committee will be to:

Monitor, track and document the identified performance indicators

Identify deviations from the set targets and taking remedial measures

- Recommend actions for continuous improvement of various processes & operations.
- Reviewing/revising targets and thrust areas as per the progress

Composition

The committee may be constituted as under:

- Chairman Director
- Convener: Nominee of Director
- Members
- All Deans, Professor In-charge of Training &Placement, Registrar
- Heads of all academic units

The committee will review progress related to attainment of targets on quarterly basis.

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Scope of Operations

The scope of operations of the committee will be as defined below:

- Development of formats and mechanism for collection and record-keeping of the performance indicators from various sources
- Analysis and assessment of the identified performance indicators at defined period of times (preferably every quarter) against the set targets
- Reporting of the state of the key performance indicators to the competent authorities at regular interval (preferably semester-wise and Academic year-wise)
- Periodic communication of the expected performance with all relevant stakeholders
- Assist the academic units/administrative sections in identifying and improving their operations. This may be for corrective purposes, in case the concerned unit/section is failing to

meet the set targets, or may be for overall improvement of the operations.

Reporting to BoG

The committee will report progress about implementation of the Strategic Plan, and

improvements in various KPIs to the BoG on yearly basis

Communication with Stakeholder groups

Since lot of inputs, suggestions, feedbacks have been taken from various stakeholder groups, it will be required to report the progress to them on yearly basis. This may be done through interim report, open house sessions, email communication, broadcasting through social media and other methods.

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THRUST AREAS FOR FOCUSSED DEVELOPMENT

Based upon the stakeholder opinion and statistical analysis of research strengths of faculty, especially considering the number of faculty members pursuing any specific area and output

so far, some thrust areas are identified for focused development:

- 1. AI/ML and data science
- 2. Sustainable development
- 3. Materials
- 4. Communication systems
- 5. Cyber physical systems
- 6. Energy, water and land-use
- 7. Design, prototyping and testing
- 8. Entrepreneurship development

Institute may even plan to open Centre for Excellence in some of the above areas depending upon the clarity about roadmap for development and sustenance of the CoE. All the thrust areas are to be supported by providing additional resources for kick-starting the work. Those areas that are already significantly developed w.r.t. hardware or presence of faculty, would be reviewed for possible upgradation or augmentation for making a bigger impact at national and international scene.

During interim reviews, if requirement of any other thrust area is identified, the same should be added to the list and developed to keep pace with changing technology, industrial practices, national missions and priorities or any other similar reason

#### Infrastructure

The instructional buildings include departments, Central Library and administrative block and are at a walking distance from the students hostels and staff colony. The instructional buildings have been so located that these are fairly near to both the hostels and the staff quarters and are at a walking distance from both. There is a branch of ICICI Bank Ltd., SBI Bank and Post-Office in the campus. A full-fledged dispensary is supervised by a team of Medical Officers and two Compounders. The Institute has also been extending facility of a Part-time Homeopathic doctor and Ayurvedic doctor in the campus. Adequately equipped Canteen buildings, one near the instructional zone and another near the hostels provide facilities to the students and the staff during and beyond the working hours of the Institute.

# Library

The Institute has a spacious and well equipped library which is being run according to an open access system. It has rich collection of about 1,33,600 volumes of books, periodicals, reports and reference material. In addition to the books from main library, some more books are issued to students from book bank also. There is a video viewing facility. Large number of books, periodicals, video cassettes and CD-ROMs are available. The library is being fully computerized.

# About the Library

The Central library is located in the Centre of the Institute, where visitors can approach easily. It is well equipped with the new and modern furniture including optimizers (stacks on tracks). The sitting area of the users is fully air conditioned. Each sitting area/ hall is having different reading cubicles for the users. Library Database has been computerized through KOHA Library. Management

Software and books are issued through RFID System & Smartcard. It has 15,847 Sq. feet plinth area in two floors (Ground and first). The reading halls of Central Library are air conditioned with glass partition Library has separate stack halls for books, periodicals (current and bound volumes), video cassettes, Reference Section and Book Bank.

# Library at a Glance

(As on 31/03/2023)

169231

**Print Books** (As per Accession Register)

3551

e-Books

32736

e-Journals

13

e-Databases

20

**Print Journals** 

740

Ph.D. Theses

2311

**M Tech Dissertation** 

12

Days	Timings			
Monday to	08:00 AM to 10	·00 PM		
Friday	00.007 1111 10 10			
Saturday & Sunday	09:00 AM to 08	:00 PM		
26th January,15th August, 2nd October & Gazetted Holidays	Closed			
CIRCU	JLATION HOUF	RS		
Days	Timings			
Monday to Friday	10:00 AM to 06:00 PM			
Saturday, Sunday & Gazetted Holidays	Closed			
BORRO	WING PRIVILE	GES		
Category of Members	No of Books	Loan Period		
UG	4 (Stack Area)	21 Days*		
PG	4 (Stack Area)	21 Days*		
PhD	8	21 Days		
Academic	20	180 Days		
Officers	8	180 Days		
Non Teaching	8	180 Days		
Library Staff	8	180 Days		
Book Bank (UG and PG)	4	Full Semester		
* Pay Overdue ( Li	Charges as per brary Polices	the Central		

# Library Automation and computerization

The Central library has a Library Management Software - KOHA (Open Source Software) customised for Institute. The circulation services have also been automated through RFID enabled system.

# Network/ Internet Facility

Library is having LAN and Wi-fi connectivity for Internet based services, which is operable on 24X7. The database & server of the library are maintained by the institutes COE department. Users are allowed to bring their own laptops.

# RFID system

## Introduction

Full form of RFID is Radio Frequency Identification; RFID is a technology similar in theory to bar code identification. With RFID, the electromagnetic or electrostatic coupling in the RF portion of the electromagnetic spectrum is used to transmit signals.

# **Instruction for Usage**

The user has to insert his/her smart card on Smartcard Printer attached to RFID KIOSK. The system will ask for username, password. User has to feed in the same. User's details will appear on screen and then user can put book(s) on work station platform. The system will show the options like borrow, return, renew, and exit. Opt any of them for processing the circulation (issue/return/renew). The user has to use Intelligent Trolley for returning (check in) the books back installed separately.

# **Gate Antenna**

If the books are taken without RFID processing, the electronics gates will detect the theft raisning the buzzer. User has to ensure the proper processing of books through RFID systems.

#### e-Resources

Library has subscribed/procured about 32,725 e-Journals from renowned publishers like Emerald, IEEE, McGraw Hill, Oxford University Press, Sage and Taylor and Francis. About 3551 e-Books (perpetual basis) of various subjects published by Pearson, Sage, Springer, McGraw Hill, Tata McGraw Hill, CRC Press, Taylor & Francis, Cengage Learning, De Gruyter, World Scientific.

#### Delnet & Other Database Services

The Central Library is member of 'Developing library Network DELNET (Database service). Users can access various databases of about 2 crore books, journals, thesis and dissertations, non print materials etc, which available with 4697 Indian and Foreign libraries. Also users can borrow the books from other libraries under 'INTER LIBRARY LOAN' scheme. Access Science-database (EST) is also available.

**Visitors** 

Approximately 300 users (Faculty, Staff, Students and fee based members) visit the library daily.

Other Features

The central library has been equipped with

- 1. CCTV Surveillance System with 32 Cameras (including video recording) covering entire Library
- 2. Smoke Alarm system.
- 3. Biometric Attendance System (staff)

Library Section Location

#### **Ground Floor**

Entrance lobby
Librarian Office
Assistant Librarian Office
Circulation Counter
Book bank
Newspapers and Magazines
Stack Area
Four A.C. Reading Halls
Acquisition Section
Processing Section
Display of New Arrivals (Central Hall)

#### First Floor

Periodicals Section
Assistant Librarian Office
Reference Section
Thesis/ Dissertation Section
Bound Volume Collection

# **Library Rules**

- 1. All the library members will enter in the library with their Identity Card.
- 2. All library members must sign In/Out register available with the attendant at the main gate of the Library
- 3. While entering the library, user should leave his/her personal belongings such as bags, personal books etc. at the property counter reserved for this purpose. Loose papers and notebooks may however be taken into the library. Members leaving the library should permit the library staff to examine their personal belongings (if asked). The members are advised not to leave any valuable/expensive items at the property counter.
- 4. The library will not be responsible for member's personal belonging/property lost in the library.
- 5. The library members shall maintain perfect order and silence in the library and should **switch off their Mobiles or keep them on vibration mode.**
- 6. Making noise, spiting, smoking, eating, drinking, sleeping, talking loudly and to visit the library in intoxicated condition is strictly prohibited in the library.
- 7. Library member will be responsible for any damage caused to the library property or reading material. The member has to replace the damage material/property and also has to pay the penalty imposed in such cases.
- 8. Student/members will vacate their seats ten minutes before the close of library.
- 9. The Librarian reserve the right to suspend/cancel the membership of any member found misbehaving with the library staff or for any other indecent behavior.
- 10. If any library member is found indulging in book hiding, stealing or mutilating, disciplinary action will be taken against him/her.
- 11. Violation of library rules or misconduct by a member may invite discontinuation of the library privileges.
- 12. Books/Documents taken out of the shelves must be left on the table. Replacing the documents on shelves by members is not encouraged as the documents may get misplaced.
- 13. Library members should not mark, underline, write, or tear pages or otherwise damage the library documents including books/magazines/journals etc.
- 14. Reference Books/Magazines are strictly prohibited outside the library
- 15. The Library, with the approval of the competent authority reserves the right to add, delete, or modify any of these rules as and when required
- 16. No photograph of the Library shall be taken without the prior permission of the Librarian.
- 17. Keep the Library premises tidy and clean
- 18. Library Timing: 8:00 AM -- 10:00 PM (Monday to Friday) & 9:00 AM -- 6:00 PM (Saturday and Sunday)
- 19. Library will closed on Gazetted Holidays declared by the Institute.
- 20. Food and beverages items are not allowed in the library.
- 21. In the Library, wearing short clothes is indecent and an act of indiscipline.
- 22. Suggestions on all aspects of library services are welcome.

# **Library Timing:**

Library Timing: 8:00 AM -- 10:00 PM (Monday to Friday)

9:00 AM -- 6:00 PM (Saturday and Sunday)

The library will close on Gazette Holidays declared by the Institute.

Dr. Rishi Kumar Tiwari Librarian and Head

(Group - A, Library Administrative Officer)

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Contact No. 0141-2713302

Ph.D.(Library and Information Science ), M.Lib

Research Interests :Emerging Trends and Tools in Library S

**Section: Overall Library Administration** 

View Detailed Profile

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Email: navdeep.library@mnit.ac.in
Contact No. 0141-2713303
M.Sc., M.LIS, UGC-NET (Four Times), PGDCA

Research Interests :Digital Library and Open Source Softwares
Section: HRM Library Administration, In-charge Acquisition and Technical Section
Expertise :Library Automation (KOHA), Digital Library (DSpace)

Circulation Timing: 10:00 AM – 06:00 PM (Monday to Friday)

Note: For any query and concern about the circulation service of the central library, members can directly send an email at: circulation.library@mnit.ac.in

केन्द्रीय पुस्तकालय Central Library Mr. Devendra Singh Rathore Library & Information Assistant (SG-II)

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Mr. Ashok
Office Attendant
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Mr. Sanju Sharma
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E- journals:

1.	ACM Digital Library View List 13
2.	American Institute of Physics View List 19
3.	ASCE Journals Online View List 35
4.	ASME Journals Online View List 33
5.	Economic & Political Weekly View List 1
6.	Emerald View List 310
7.	IEEE Electronic Library (IEL) Online View List 375
8.	JGate Plus (JCCC) View List 24573
9.	JSTOR View List 4052
10.	Oxford University Press eSS Collection-262 titles View List 262
11.	Sage View List 55
12.	ScienceDirect View List 824
13.	Springer Link View List 1713
14.	Taylor and Francis View List 425
15.	Royal Society of Chemistry View List 46

S.No. Particulars Journals List No. of Journals

# e-Databases

S. No.	Particulars
1.	Bloomsbury Architecture Library
2.	CMIE ProwessIQ
3.	CRIS INFAC Industrial Information (CRISIL)
4.	Institute for Studies in Industrial Development (ISID) Database
5.	<u>MathSciNet</u>
6.	Online Standards Portal (BIS)
7.	<u>Scopus</u>
8.	Web of Science Lease Access (20 year back files)
9.	Building Types Online (Architecture)
10.	CMIE Economic Outlook
11.	EPWRF India Time Series (EPWRFITS)
12.	Sage Business Case
13.	SciFinder-n Registration Link

S.No.	Publisher	Subject	No. of Titles	Purchased year	URL Address
1.	Pearson	Civil Engg. EE &ECE Computer Sc. & I.T.	37 92 169	2013	MyiLibrary – <a href="http://ebookcentral.proquest.com/lib/mnitin">http://ebookcentral.proquest.com/lib/mnitin</a>
2.	Cengage Learning/Gale	Electrical Engg.	03	2013	https://www.galepages.com/inmalviya/ebooks
3.		Mechanical Industrial Electrical & ECE	37 39 65	2013	https://mhebooklibrary.com/action/showPublications
4.	Springer	Engineering Earth & Env. Mathematics & Statistics	775 285 535	2013	http://link.springer.com
5.	Tata McGraw Hill (TMH)	Mechanical EE &ECE Chemical Engg.	50 79 06	2013	https://www.expresslibrary.mheducation.com/bookshelf
6.	CRC Press and Taylor & Francis (T&F)	Electrical ECE Mechanical Industrial Computer Materials Civil Engg. Chemical Architecture HSS Cent. for Eng.	73 118 103 76 81 45 19 53 115 25 16	2013 & 2021	https://www.taylorfrancis.com/search?isLicensed=true&key=
7.	Sage Pub.	Humanities & Social Sc.	04	2013	http://knowledge.sagepub.com
8.	De Gruyter	Architecture Civil ECE Mathematics Metallurgy	141 01 01 01 01	2022	https://www.degruyter.com/search?query=*&startItem=0&pageSize=10&so
9.	World Scientific	Physics Mechanical Mathematics Civil	25 01 02 01	2022	https://www.worldscientific.com/page/holdings/malaviya-national-institute
10.	Pearson	Civil Computer DMS Mathematics Mechanical Metallurgy	51 05 31 05 01	2022	https://elibrary.in.pearson.com/

	Physics	17		
	ECE	19		
	Chemistry	28		
	Electrical	05		
Bloomsbury				
•	Architecture	314	2022	https://www.bloomsburyarchitecturelibrary.com/custom-browse?docid=bro
Library				
	Total EBooks	3551		

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Dr. Akhilesh Mathur Assistant Professor Contact No. 9997111284 E mail: akhilesh.ee@mnit.a View Detailed Profile
Dr. Amit Mahesh Joshi Assistant Professor Contact No. 9549654239 E mail: amjoshi.ece@mnit.a View Detailed Profile
Dr. Gunjan Soni Assistant Professor Contact No. 9549654559 E mail: gsoni.mech@mnit.a View Detailed Profile
Dr. Swati Sharma Dr. Kunal Borse Assistant Professor Contact No. 9665364237 (King Email: swati.meta@mnit.activew Detailed Profile
Dr. Nand Kumar Associate Professor Contact No. 9549659074 E mail: nkumar.arch@mnit.a View Detailed Profile
Dr. Smita Naval Assistant Professor Contact No. 9024141359 E mail: smita.cse@mnit.ac.i View Detailed Profile
Dr. Hrushikesh M. Gade Assistant Professor Contact No. 9549650215 E mail: hrushikesh.chem@n View Detailed Profile
Dr. Shweta Sharma Assistant Professor Contact No. 9549650768 E mail: shweta.dms@mnit.a

Name of Department/Centre

Name of Department/Centre	
Centre for Energy & Environment	Dr. Parul Mathuria Assistant Professor Contact No. 9549650808 E mail: parul.cee@mnit.ac.i View Detailed Profile
Physics	Dr. Kamlendra Awasthi Assistant Professor Contact No. 9549659179 E mail: kawasthi.phy@mnit View Detailed Profile
Chemistry	Dr. Biman Bandyopadhyay Assistant Professor Contact No. 9549650172 E mail: biman.chy@mnit.ac View Detailed Profile
Mathematics	Dr. Anubha Jindal Assistant Professor Contact No. 9549652965 E mail: anubha.maths@mni View Detailed Profile
Humanities & Social Sciences	Prof. Vibhuti Singh Shekhav Professor Contact No. 9549657342 E mail: vibhutisingh@mnit.: View Detailed Profile
National Centre for Disaster Mitigation & Management	Dr. S. D. Bharti Professor Contact No. 9549654196 E mail: sdbharti@mnit.ac.ir View Detailed Profile
Materials Research Centre	Dr. Bhagwati Sharma Assistant Professor Contact No. 9549650012

E-Books (Perpetual Access)

E mail: bhagwati.mrc@mni

E-Book Accession Register with Hyperlinks (As on 31 March 2023)

The Library Has 6 reading hall named as:

#	Floor	Name of the reading rooms
1	Ground Floor	G1, G2, G3 and G4
2	First Floor	F1 and F2

# Departmental Library Coordinators

#### Canteen

One canteen near the instructional zone, another near the hostels and one Nescafe coffee shop provides refreshments to the students and the staff during and beyond the working hours.

Our canteen has a cordial and friendly atmosphere and the authorities see to it that the best possible nutritious and hygienic food services are being offered. Considering the infancy of the canteen, a number of infrastructural improvements in the existing facilities are being consistently addressed.

#### **Guest Houses**

There are two guest houses in the campus to cater the needs of guests and students.

# **Sports**

Adequate facilities are available for sports and games and for co- curricular activities. The campus is well laid out with roads, electrical installations, water supply and underground drainage system etc.

Sport is a discipline focused on studying and practicing human movement and exercise and its impact on health and physical performance. Our program will help you develop knowledge and practical skills related to community health promotion, chronic disease prevention, and rehabilitation. You will learn to use some of the tools in lifestyle management, nutritional guidance, and physical activity programming keep fit. to Physical Education & Sports in the institute is dedicated to the overall development of individuals' personalities through participation in sports and exercise. Physical Fitness across the lifespan through the Physical, Psychological, Emotional, Mental, Social and Biological sciences will continue be nationally recognizedbest technical institutes in the to among country. More than 1000 students regularly participate in sports and conditioning activities. The institute hasvarious sports facilities viz. Basketball, Volleyball, Tennis, playfield (Football, Cricket, Kabaddi, Track and Field,) Badminton, Table Tennis, Chess, Gymnasium, Yoga, etc. The Physical Education & Sports office supports and complements the Student's sports by providing facilities, coaches, programs, athlete support services, and administrative support for Performance Sports at the institute, where students and student teams perform at the state and national levels. Joining a sports team allows you to keep fit and meet lots of new people in the institute and other CFTIs to unburden your mental stress.

# We have a good laugh both on and off the court!!

#### **Vision Statement**

Sports provide ample and diversity of activities to participate in the physical activity, exercise and sports and competitions. Our commitment is to encourage, develop and enable opportunities for sport participation to all campus community.

# Mission Statement FIT MNIT FIT NATION

- An essential characteristic of the sport is its ability to draw upon a range of students to inform and advance the fields of sport, exercise, education, health, and well-being through fundamental and applied research.
- The Physical Education & Sports office will continue to pursue higher performance within the institute and among other CFTIs.
- Through creating excellence in sports infrastructures, the Physical Education & Sports office will offer students and staff members and their families the opportunity to develop a confident understanding of issues of the current global significance of hypokinetic diseases and sedentary lifestyles.
- As part of its commitment to informing and developing policy and practice in its fields of expertise, the Physical Education & Sports office will offer to continue professional development opportunities for various groups associated with its academic objectives.
- The Physical Education & Sports office will continue and expand upon its longstanding enterprise activity. This will include working with external elite sportspeople, Associations, and Federations to enhance Sports performance for the country.
- The Physical Education & Sports office is committed to an equitable distribution of resources and opportunities, commensurate with the interests and needs of a multidisciplinary environment aiming new education policy in 2020.

The Physical Education & Sports office will continue to explore mechanisms to ensure that the most talented individuals have access to our health holistic fitness learning environment.

The Vision FIT MNIT FIT NATION"An active, healthy and inclusive Jaipur, where sport, physical activity, and active recreation provide a common platform for participation, fun, and achievement. It binds communities and the nation and where the ideal environment of MNIT is used sustainably to enhance confidence in ourselves." We envisage MNIT Jaipur where: Physical activity opportunities are accessible to all; All should frequently play outdoors in safe environments; Activity is at the Sports center, and physical literacy is as essential as any other subject to strengthen mental/ psychological health; individual benefits from the feel-good factor of being physically active; Being active is the proclaim of each student;

#### **Objectives**

# **Organisation of Games & Sports Tournaments**

Physical Education & Sports office organizes All India inter NIT Sports tournaments for students and staff members, Inter-branch sports tournaments for students, Annual Athletic meet for students, MST (invitational tournament), All India Advani Memorial Basketball Tournament (Professional teams), and other invitational tournaments. Students also organize different sports leagues in the institute.

## **All India Inter NIT Sports Tournaments**

The All India inter NIT Sports tournaments are being entrusted by the council of Sports hosted by one of the NIT every year in June/ July, where all the students participate in Games/ Sports along with Coach and Managers. There is a set rule to be followed in the tournament. The respective participating NITs bear the expenses. The host NIT provides trophies/ Mementos and Diplomas of Certificate of merit and participation.

#### **Inter-Branch Sports Tournament**

Inter-branch Sports Tournament (IBST) is a free sports program available to all students at the institute. We organize different sports leagues where each team competes against each other all year round. With nearly a fixture every month, there's always something to get involved in from all the mainstream sports.

It's a great way to get involved in sports life, meet new people, play some new sports, or all your favorite sports from school. Even if you aren't playing Inter-branch Sports Tournament (IBST), many people enjoy supporting their Branch Teams and friends by cheering them on. Get Involved! How it all works:Inter-branch Sports Tournament (IBST)teams compete in each sports league or event throughout the year and are awarded points depending on their final position. The Branch Team with the largest points total at the end of the year is deemed the winner (men's and women's scored separately), and the Branch team with the largest total when the men's and

women's totals are added is deemed the overall winner. Most league matches are scored 5pts for a win, 4pts for a draw, and 2pts for a loss. Winners are awarded mementos/ Souvenirs and Diplomas of Certificate of merit.

# **Annual Athletic Meet (AAM)**

An annual Athletic meet is being organized every year for Boys and Girls in more than 32 events in 2-3 days. Students participate in march past, and each student participates in athletic events. The First 3-positions of all the events are awarded medals and Diplomas of Certificate of merit. Winner scores: Gold medal 5pts, Silver medal 4pts, and Bronze medal 1pts.

# **Sports Administration**

Prof. Mahesh Kumar Jat Dean of Students Welfare dean.sw@mnit.ac.in +91-141-2715039, 2713316

Dr. Dinesh Kumar Associate Dean (Sports) ad.sports@mnit.ac.in

Dr. Swati Sharma
Coordinator (Indoor Games)
coordinator.sports.indoor@mnit.ac.in

Dr. Hemant Kumar Meena Coordinator (Outdoor Games) coordinator.sports.outdoor@mnit.ac.in

#### **Facilities**

- Outdoor Games
- Indoor Games

# **Outdoor Games**

# Basketball (Two Courts with flood lights)

There are 04 cemented Basketball courts (2+2) available according to the FIBA (Federation International Basketball Association) standard with sufficient space and sitting capacity around. Two central courts are equipped with floodlights, and the other two are in front of the Aurobindo Hostel. Students participate in the inter-branch tournament, invitational tournament, MST, All India inter NIT Basketball Tournaments, and the All India Advani Basketball professional players

Tournament. The Institute team won many laurels for the institute at different levels. Whether you've been playing for years or have never picked up a basketball, we welcome you to our team.

- The competition is being conducted under the rules of the Basketball Federation of India (BFI) (www. https://www.basketballfederationindia.org/), unless otherwise modified by the organizer.
- 2. Basketballs: BFI-approved Balls are being used during practice, Inter-branch Tournaments, and the All India inter NIT Sports Tournament.
- 3. It is the responsibility of each respective branch Team to play in playing Kit during the Interbranch Tournaments.
- 4. Coloured T-Shirts, Shorts and Shoes will be used duringpractice and other Tournaments.
- 5. The Inter-branch Tournaments Teams comprises 10-members (Boys and Girls separately) only.
- 6. The Institute Team for the All India Inter-NIT Basketball Tournament comprises 12-members maximum and a Coach and Manager.
- 7. Institute will bear all the expenses to participate in the All India Inter-NIT Basketball Tournament in the country, including Sports Kit, Track Suit, Travelling expenses, Refreshments, and dearness allowances.
- 8. Criteria to be part of the institute Basketball Team is performance-based, regular practice with Team members, and recommendation of the Sports Officer/ Coach.
- 9. Finalists (Champion & Runner's Up) of inter-branch Basketball tournaments will be rewarded with a Souvenir/ Trophy and a Diploma Certificate.
- 10. Apart from regular Basketball, students organize (03 on 03) three Three Basketball Tournamentwhere more students participate with full enthusiasm and motivation. Modified rules and regulations are being implemented.

# Volleyball (Three Courts with flood lights)

The institute Volleyball team is one of the most culturally diverse teams, including members from all corners of the country. We are a friendly team and offer almost non-stop social events. We welcome all abilities and have a group willing to coach players with little to no experience. There are three standard clay Volleyball courts in the institute with floodlights. Volleyball is one of the popular games of the institute. Students regularly practice and participate in inter-branch volleyball tournaments, invitational tournaments, MST, and All India inter NIT Volleyball Tournaments and bring laurels to the institute.

Please feel free to contact any of our committee members with any queries!

- 1. The competition shall be conducted under the Volleyball Federation of India, commonly known by the acronym VFI (<a href="https://www.volleyballindia.com">https://www.volleyballindia.com</a>), unless otherwise modified.
- 2. It is the responsibility of each NITs to ensure their Volleyball playing Kit (Jersey, Shorts, Shoes etc.) for participating in the All India inter NIT Volleyball Tournament. The Organizing NIT will provide no playing kit except for Match Volleyball.
- 3. **Jersey** must visibly display a **number** at least 4 inches high on the front, 6 inches high, and centered on the back, both **numbers** being the same, and at least 3/4 inches wide at the narrowest point. Team players' **numbers** must all be the same color and size. The **jerseys** must be numbered permanently from 1 and 99, and duplicate **numbers** are not allowed.
- 4. Suppose players share the Libero position from match to match. In that case, a **player** shall wear different Colors from other Team members and the same jersey number whenever they play, whether they are orare not assigned to the **Libero** position.
- 5. Match Volleyballs officially approved (Nivia Leather pasted) shall be used in the practice, inter-branch, and All India inter NIT Volleyball Tournament.
- 6. If both the teams have the same color of Kit, then Bibs will be provided by the institute for that particular match. Coloured T-Shirts, Shorts, and Shoes will be used during practice and in any Tournaments.
- 7. The Inter-branch Tournaments Teams comprises 10-members (Boys and Girls separately) only.
- 8. The Institute Team for the All India Inter-NIT Basketball Tournament comprises 12-members maximum and a Coach and Manager.
- 9. Institute will bear all the expenses to participate in the All India Inter-NIT Volleyball Tournament in the country, including Sports Kit, Track Suit, Travelling expenses, Refreshments, and dearness allowances.
- 10. Criteria to be part of the institute Volleyball Team is performance-based, regular practice with Team members, and recommendation of the Sports Officer/ Coach.
- 11. Finalists (Champion & Runner's Up) of **inter-branch Volleyball tournaments** will be rewarded with a Souvenir/ Trophy and a Diploma Certificate.

# Tennis (Three Courts with flood lights)

There are three standard Synthetic Tennis courts in the institute with floodlights. Tennis is one of the popular games of the institute. There are plenty of opportunities to play tennis at the institute Tennis courts; whether you want to play competitive tennis or turn now and then, there will be a place for you! Our institute is open to those wishing to play regular competitive tennis or have a social game every week.

Students regularly practice and participate in the inter-branch tournament, invitational tournaments,

MST, and All India inter NIT Tennis Tournaments and always bring laurels to the institute. We have men's teams and women's teams, so there is plenty of room!

- 1. The competition shall be conducted under the All India Tennis Association (AITA) rules (<a href="www.aitatennis.com">www.aitatennis.com</a>) unless otherwise modified in these rules.
- 2. The inter-branch Tennis Tournament for Boys/ Men shall be played in five matches: 02-Men Singles, 01-Doubles, Reverse Singles, and 4th Singles. No player may play more than three matches in a tie. A team must win three matches in a tie to be successful. Each match is the best of three games.
- 3. Each Men Captain of participating inter-branch Tennis Team shall give the players' names and order of matches specified as A, B, C, etc., in Singles and AC, etc., in Doubles. Order of matches for *Men Tie* shall be:

1 <sup>st</sup> Single	A v/s X
2 <sup>nd</sup> Single	B v/s Y
1 <sup>st</sup> Doubles	AC v/s XZ
3 <sup>rd</sup> Cross Single	A v/s Y
4 <sup>th</sup> Singles	C v/s Z

4. The inter-branch Tennis Tournament for Girls/ Women shall be played in Three matches: 02- Singles and a Doubles. No player is allowed to play in more than two matches in a tie. A team must win Two games in a tie to be successful. Each game is the best of three games.

Order of matches for Women Tie shall be:

1st Single	A v/s X
2 <sup>nd</sup> Single	B v/s Y
1st Doubles	AC v/s XZ

- 5. A B and X Y shall be determined by drawing lots.
- 6. **Women Captain** of participating Branch Tennis Team shall give the players' names and order of matches specified as A & B, for Singles and AC Doubles.
- 7. The institute will provide match Tennis balls for Men and Women in inter-branch Tennis Tournaments.
- 8. Coloured T-Shirts, Shorts, and non-marking Shoes will be used during practice and in any Tournaments.

- 9. The Inter-branch Tournaments Teams comprise 05-members (Boys and Girls separately) only.
- 10. The Institute Team for the All India Inter-NIT Basketball Tournament comprises a maximum of 10-members (05-Boys & 05-Girls) and a Coach and Manager.
- 11. Institute will bear all the expenses to participate in the All India Inter-NIT Tennis
  Tournament in the country, including Sports Kit, Track Suit, Travelling expenses,
  Refreshments, and dearness allowances.
- 12. Criteria to be part of the institute Tennis Team is performance-based, regular practice with Team members, and recommendation of the Sports Officer/ Coach.
- 13. Finalists (Champion & Runner's Up) of **inter-branch Tennis tournaments** will be rewarded with a Souvenir/ Trophy and a Diploma Certificate.

# Cricket (Two cemented pitch and one cricket pitch)

There is no separate Cricket field in the institute. Cricket is being played on the common playfield. There are two turf cricket wickets in the center of the playfield, and two cemented cricket wickets nets for practice. Students are participating in the inter-branch, invitational, MST, and All India inter NIT Cricket Tournaments and won many laurels for the institute.

- The competition shall be conducted under the Board of Cricket Control of India (BCCI)
  rules or ICC cricket Rules and Regulations (<a href="https://www.icc-cricket.com/about/cricket/rules-and-regulations/playing-conditions">https://www.icc-cricket.com/about/cricket/rules-and-regulations/playing-conditions</a>) unless otherwise modified by the institute.
- 2. The All India inter NIT Cricket Tournament for Men will be played following T20 Rules and Regulations.
- 3. It is the responsibility of each respective branch Team to play in playing Kit during the Interbranch Tournaments.
- 4. Coloured T-Shirts, Shorts and Shoes will be used during practice and other Tournaments.
- 5. The Inter-branch Tournaments Teams comprises 14 members of Boys only.
- 6. The Institute Team for the All India Inter-NIT Cricket Tournament comprises 16-members maximum and a Coach and Manager.
- 7. Institute will bear all the expenses to participate in the All India Inter-NIT cricket Tournament in the country, including Sports Kit, Track Suit, Travelling expenses, Refreshments, and dearness allowances.
- 8. Criteria to be part of the institute Cricket Team are performance-based, regular practice with Team members, and recommendation of the Sports Officer/ Coach.

- Apart from regular cricket, students organize the Hong Kong Sixes (Tennis Ball Cricket)
   Tournament where more than 1000 students participate with full enthusiasm and motivation. Modified rules and regulations are being implemented.
- 10. Finalists (Champion & Runner's Up) of inter-branch Cricket tournaments are rewarded with a Souvenir/ Trophy and a Diploma Certificate.

# Football (Two Fields)

The institute has two standard football fields, commonly known as a playfield. Football is one of the most popular gamesat the institute. Students are regularly practicing under Dr. Subir Debnath (Sports Officer & certified Football Coach) and participating ininter-branch tournament, invitational tournaments, MST and All India inter NIT Football Tournaments and played with satisfactions and laurels.

- 1. The competition shall be conducted under the Indian Football Association, abbreviated as IFA (<a href="https://www.the-aiff.com">https://www.the-aiff.com</a>), unless otherwise modified by the institute.
- 2. The Duration of all League matches shall be 30 (thirty) minutes each half with an interval of five (5) minutes after the first half in the inter-branch Football Tournament.
- 3. In the case of Knock out Tournament, 30 (thirty) minutes, each half with an interval of five (5) minutes, will be given. An extratime of Five (5) minutes each half shall be allowed in case of draw Games with an interval of two (2) minutes. If no decision is reached after the extra time, the tie shall be decided by the Penalty Tie-breaker rule.
- 4. Each branch Football team's responsibility isto ensure their Football playing Kit (Football Studs, Jersey, Shorts, and Shine guards) for participating in the inter-branch Football Tournament. The institute will provide no playing kit except Match Footballs.
- 5. If both the teams have the same color of Kit, then Bibs will be provided by the institute for that particular match.
- 6. It is the responsibility of each respective branch Team to play in playing Kit during the Interbranch Tournaments.
- 7. The Inter-branch Tournaments Teams comprises 16 members Boys only.
- 8. The Institute Team for the All India Inter-NIT Football Tournament comprises 16members maximum, along with a Coach and a Manager.
- 9. Institute will bear all the expenses to participate in the All India Inter-NIT Football Tournament in the country, including Sports Kit, Track Suit, Travelling expenses, Refreshments, and dearness allowances.
- 10. Criteria to be part of the institute Football Team is performance-based, regular practice with Team members, and recommendation of the Sports Officer/ Coach.

11. Finalists (Champion & Runner's Up) of inter-branch Football tournaments will be rewarded with a Souvenir/ Trophy and a Diploma Certificate.

#### **Athletic**

There is a common playfield where the Track and Field is prepared before any tournament with sufficient space around. There are stairs in one side of the field for watching athletic performances. Many students are practicing morning and evening, out of which 20 to 30 players are selected for institute team based on individual performance for each sports tournaments. Institute won many laurels in many Athletic meet of the country.

# Yoga

There is no separate Yoga & Meditation Hall in the institute. Students practice Yoga on the VLTC porch or Open-air Theatre. Institutes provide Yoga mats and stretch bends for practice. Students practice regularly and participate in the inter-branch, invitational, and All India inter NIT Yoga Tournaments. Through participation in Yoga and meditation, students develop a healthy and balanced lifestyle and also overcome academic stress.

- 1. The competition shall be conducted for both Men and Women categories separately.
- 2. Lots shall draw the sequence of participating teams during the manager's meeting.
- 3. The All India inter-NIT Yoga competition will consist of the following yoga schedule

Part A	Surya Namaskar	
Part B	Four Compulsory Asanas	4
	Three Optional Asanas	3
Part C	Two Shat Kriyas	2
		Total 1

- 4. The competitors will have to retain each yoga exercise in the following sequence, which will be counted after attaining the final position:
  - i. One round of Surya Namaskar(Twelve Count/ with mantras).
  - ii. One minute for each compulsory Asanas.
  - iii. Thirty seconds for each optional Asanas.
  - iv. Within two minutes each for Sutraneti, Jalneti, Nauli, and Shat Karma, Kapalbhati and
  - v. 10 minutes for Vastra Dhau
- 5. No individual Championship will be conducted/ Organised.
- 6. **PART A** (Compulsory Yogic Exercises for Men and Women)
  - I.Surya Namaskar (Men & Women) with Twelve counts/ mantras
  - II.Asanas (Men & Women):

#### a. Paschimottanasana

S. No.	Boys/ Men	S. No.	Girls/ Women
1.	Mayurasana	1.	Purna Bhujangasana
2.	Hanumanasana	2.	Natrajasana
3.	Padambakasana (Urdhvakukuttasana)	3.	Vatayanasana
4.	Purna Shalabhasana	4.	Ardha Bandh Padmotanasana
5.	Setubandh Sarvavangasana	5.	Ekpad Shirsasana
6.	Titabhasana	6.	Vibhakta Paschimottanasana
7.	Purna Chackra Badhasana	7.	Purna Matasendrasana
8.	Vrischikasana	8.	Epad Rajkapaopasana

- b. Sarvangasana
- c. Dhanurasana
- d. Karnapida
- 7. PART B (Optional Yogic Exercises select any Three of the following)
- 8. PART C (Shat Kriyas)
  - a. Shat Kriyas (Women)

i.Jal Neti or Sutra/ Rubber Neti

ii.Shit Karam kapalbhati (Jalkapalbhati)

(Water intake through the mouth and out through nostrils)

b. Shat Kriyas (Men)

i.Shit Karam kapalbhati (Jalkapalbhati)

(Water intake through the mouth and out through nostrils)

ii.Vastra Dhauti (muslin cloth 6-7 mts in Length & 8 cm in width)

Or

Nauli (Vam, Dakshin, and Madhyan)

- 9. The Inter-branch Tournaments Teams comprise of 05-members each for Boys and Girlsseparately.
- 10. The Institute Team for the All India Inter-NIT Yoga Tournament comprises a maximum of 10-members (05-Boys & 05-Girls) maximum and a Coach and Manager.
- 11. Institute will bear all the expenses to participate in the All India Inter-NIT Yoga Tournament in the country, including Sports Kit, Track Suit, Travelling expenses, Refreshments, and dearness allowances.
- 12. Criteria to be part of the institute Yoga Team is performance-based, regular practice with Team members, and recommendation of the Sports Officer/ Coach.

13. Finalists (Champion & Runner's Up) of inter-branch Yoga tournaments will be rewarded with a Souvenir/ Trophy and a Diploma Certificate.

#### **Events**

- MNIT Sports Tournament (Every Year)
- Annual Athletic Meet (Every Year)
- Inter Branch Tournaments (Every Year)
- Inter NIT Tournaments

We have participated in the Sports Tournament held at IIT Delhi Sportech'15 27th Feb-2nd March, 2015. The event was participated by around 40 prestigious and premiere institutes of India including IITs, NITs, JNU, DTU, NSIT, Shri Ram College, Hansraj, Maharaj Agrasen, Bharti Vidyapeeth, GGSIPU, GB Pant, YMCA, Sharda, Gargi College, Maulana Azad. Under my Coaching and guidance (Dr. Virender Singh) our institute has won

- Gold Medal in Lawn Tennis(Men)
- Silver Medal in Table Tennis(Girls)
- Secured 2nd Position in Chess(Men)

Event Name	М
Yoga Workshop 2022	Click here
55th Annual Athletic Meet 2022	Click here
MNIT Cyclothon 2022	Click here

Archive		
Event Name	We	
India Advani Memorial Basketball Tournament	Click here	
nnual Athletic Meet'16	-	
nnual Athletic Meet'15	-	
nnual Athletic Meet'14	Click here	
nnual Athletic Meet'13	Click here	

**Sports Timings** 

# **Morning**

For Sports Facilities 6:00 AM to 8:00 AM

## **Evening**

For Sports Facilities 4:00 PM to 10:00 PM

Office timings 8:00 AM to 8:00 PM

#### **Banks**

There is a branch of the ICICI Bank Ltd. and SBI Bank in the campus. Other reputed banks such as SBI, OBC, and PNB etc. are within walking distance from the institute campus.

Banking Facilities in MNIT is extended by ICICI Bank through its MREC Campus, Jaipur Branch that is located in the MNIT premises. ATM facility, Internet Banking, Telebanking are available here.

**Branch Details** 

MNIT Campus Branch, Jaipur IFSC Code: ICIC0006768 MICR Code: 302229031

**Timings** 

09.30 AM - 03.00 PM (Monday - Saturday) 2nd and 4th Saturday- OFF

**ATM** 

24\*7 hrs ATM is situated in the control room near dispensary in the campus

**Contact Information** 

Mr. Manoj Mantri Deputy Branch Manager +91-8696924225

manoj.mantri@icicibank.com

ICICI Bank Ltd.

Prabha Bhawan, MNIT Campus

JLN Marg, Malviya Nagar, Jaipur- 302017

Customer Care No: 1860 120 7777 Customer Care Rajasthan: 9829222292

Banking Facilities in MNIT is extended by and SBI Bank through its MNIT Campus, Jaipur Branch that is located in the MNIT premises. Internet Banking, ATM, Loans are available here.

#### **Branch Details**

MNIT Campus Branch, Jaipur IFSC Code: SBIN0015921 MICR Code: 302002066

**Timings** 

10.00 am - 4.00 pm (Monday - Saturday) 2nd and 4th Saturday- OFF

**ATM** 

24\*7 hrs ATM is situated in the premises of the Bank.

**Contact Information** 

## Mrs. Savita Gothwal

Branch Manager

SBI Bank, MNIT Campus Branch JLN Marg, Jaipur-302017 +91-9636961859 +91-141-2529111 sbi.15921@sbi.co.in

Customer Care Toll Free: 1800 11 22 11

### **Post-Office**

There is a Post Office in the campus of MNIT.

There is a Post Office in the campus of MNIT.

#### Post offices offers:

- 1. Mail-related services such as Speed Post, Reg.
- 2. Sale of postage stamps, Postal orders.
- 3. NSC
- 4. RD/SB/MIS Accounts.

### The postal code of institute is: 302017

#### **Timings**

9.00 am - 5.00 pm (Monday - Friday) 9.00 am - 2.00 pm (Saturday)

**Contact Information** 

#### **Post Master**

Post Office Malaviya National Institute of Technology JLN Marg, Jaipur-302017 Phone no: 0141 - 2529165

#### **Medical Facilities**

A full-fledged Dispensary is available in the campus. It is supervised by a residential Medical Officer.

The services of a part-time Homeopathy Doctor and a Lady Doctor are also available to students and to the family members of the staff.

Primary Care Dispensary is available in the campus. It is supervised by Medical Officers and two full time nursing staff. Also services of a part-time Ayurvedic Doctor, Homeopathy Doctor and a Gynecologist are also available to students and staff and their family members. Medicines for routine ailments are provided free of charge.

For more details please see on <u>Institute's Intranet</u>

Timing
Dispensary Timing
Monday to Saturday
9.00 AM - 07.00 PM
Sunday
9.00 AM - 01.00 PM

Gynecologist Monday to Friday 04.30 PM - 06.30 PM Saturday 05.00 PM - 06.00 PM Orthopedician Every Saturday 09.00 AM - 10.00 AM

Pediatrician Monday to Friday 09.00 AM - 01.00 PM Saturday Off Sunday 09.00 AM - 11.00 AM

Allopathic Doctor
Monday to Saturday
09.00 AM - 07.00 PM
Monday to Saturday- Medical officer not available
01.00 PM - 03.00 PM
Sunday
09.00 AM - 11.00 AM
Goverment Holiday
09.00 AM - 11.00 AM
Off on National holiday

Ayurvedic Doctor Monday to Saturday 04.30 PM - 06.30 PM Off on Sunday

Physiotherapy Monday to Saturday 10.00 AM - 04.00 PM Off on Sunday

Homeopathic Doctor Monday to Saturday 09:00 AM - 01:00 PM Off on Sunday

Endocrinologist Every Thursday 4.30 PM to 5.30 PM

Dermatologist Every Tuesday 4.30 PM to 6.30 PM Cardiologist Every Wednesday 05.15 PM - 06.15 PM Contact Information

## **Medical Officer**

Dispensary

Malaviya National Institute of Technology

JLN Marg, Jaipur-302017

Phone no:0141 - 2713305

#### 9549650438

For hostel students emergency one nursing staff is available at hostel no-1 near mess after dispensary hours.

#### **Registered Office**

SMH Centre for Counselling and Psychotherapy (OPC) Pvt. Ltd, 2nd Floor, B-417, Pradhan Marg, Malviya nagar, Jaipur - 302017.

#### **Clinic Address**

Plot No. A-734, Siddarth Nagar A, near Jain temple, Jawahar circle, Airport terminal-2 Jaipur - 302017.

#### **NIT Statutes & Act**

#	Title
1	Certificate regarding Conversion from MREC to MNIT
2	NIT Act 2007
3	Gazette Notification NIT-Statutes dated 23 April, 2009
4	Gazette Notification NIT (Amendment) Act 2012
5	Comprehensive NIT Act 2012
6	Gazette Notification NIT-Statutes (Amendment) Act 2017

**Data for NIRF** 

**NIRF 2023** 

Institute Id: IR-O-U-0410

**Enginnering** 

**Architecture and Planning** 

## Management Over All

## **NIRF 2022**

Institute Id: IR-E-U-0410

**NIRF 2021** 

Institute Id: IR-E-U-0410

**NIRF 2020** 

Institute Id: IR-E-U-0410

**NIRF 2019** 

Institute Id: IR-E-U-0410

**NIRF 2018** 

Institute Id: IR-2-E-0E-U-0410

**NIRF 2017** 

Institute Id: IR17-ENGG-2-18620

1	Prof. Rajesh Kumar	Coordinator
2	Dr. sumit Khandelwal	Member
3	Dr. Pilli Emmanuel Shubhakar	Member
4	Dr. Amar Patnaik	Member
5	Dr. Kapil Shukla	Member
6	Dr. Chitrakant Sahu	Member
7	Dr. Mahipal Jadeja	Member
8	Dr. Satyasai Jagannath Nanda	Member
9	Dr. Priyanka Harjule	Member
10	Dr. Ravita Lamba	Member
11	Sh. Raj Kumar Dube	Member

For comments and feedback please contact: coordinator.rankings[at]mnit.ac.in

Members, NIRF Core Committee

**Data for ARIIA** 

#### **ARIIA 2021**

Institute Id: ARI-I-1076

**ARIIA 2020** 

Institute Id: ARI-I-1076

For comments and feedback please contact: ariia[at]mnit.ac.in

Members ARIIA(Atal Ranking of Institutions on Innovation Achievements) Committee

	,
Prof. Rajesh Kumar	Coordinator
Dr. sumit Khandelwal	Member
Dr. Pilli Emmanuel Shubhakar	Member
Dr. Amar Patnaik	Member
Dr. Kapil Shukla	Member
Dr. Chitrakant Sahu	Member
Dr. Mahipal Jadeja	Member
Dr. Satyasai Jagannath Nanda	Member
Dr. Priyanka Harjule	Member
Dr. Ravita Lamba	Member
Sh. Raj Kumar Dube	Member

Αd	mı	nist	rati	on

Visitor

Smt. Droupadi Murmu

Honourable President of India

Chairman, Council of NITs

Shri Dharmendra Pradhan

Hon'ble Union Cabinet Minister, MoE, Gol Chairman, Council of NITs

#### **Board of Governors**

Constitution of the Board of Governors of Malaviya National Institute of Technology, Jaipur (Rajasthan) as per NIT Act, 2007 (29 of 2007):

## Chairman

## Prof. N. P. Padhy

Director, Malaviya National Institute of Technology Jaipur (Rajasthan)

Nomination: Section 11 Clause (a)

### **Ex-Officio Member**

## Prof. N. P. Padhy

Director, Malaviya National Institute of Technology Jaipur (Rajasthan)

Nomination: (b)

#### Member

## Special Secretary/Additional Secretary/Joint Secretary dealing with Technical Education

Department of Higher Education, Ministry of Education

Nomination: (c)

#### **Financial Adviser**

Department of Higher Education, Ministry of Education

Nomination: (c)

### Sh. Vishwas Jain

Managing Director and Founder, Consulting Engineers Group

Nomination: (d)

## **Sh. Pramod Kumar Agarwal**

Chairman cum Director, Derewala Industries Ltd.

Nomination: (d)

## To be nominated by Council of NITSER

Nomination: (e)

## To be nominated by Council of NITSER

Nomination: (e)

## Prof. Ravindra Nagar

Professor, Department of Civil Engineering, MNIT Jaipur (Senate Nominee)

Nomination: (f)

## Dr. C. Periasamy

Assistant Professor, Department of Electronics & Communication Engineering, MNIT Jaipur (Senate Nominee)

Nomination: (f)

## Prof. Rangan Banerjee

Director, Indian Institute of Technology Delhi Hauz Khas, New Delhi

Nomination: (g)

## Secretary

#### Prof. M. M. Sharma

Registrar (I/C), Malaviya National Institute of Technology Jaipur (Rajasthan)

Nomination: Section 18 Clause (2)

#### Senate

Under the provision contained in NIT Statutes and as approved by MNIT Senate, SENATE of the Institute shall consists of the following:

The Director (Ex-Officio)

**Deans** 

**All Professors** 

**Head of Departments** 

**Educationists/ Specialists** 

**Prof. Ashok Kumar Pradhan** 

Department of Electrical Engineering, IIT Kharagpur

#### **Prof Shuchi Srivastava**

Department of Humanities & Head of Management Studies, MANIT Bhopal

## Prof. Vipul Rastogi

Department of Physics, IIT Roorkee

Registrar (Ex-Officio)

#### Chairman

Prof. N. P. Padhy

Chairman, MNIT Jaipur

Dr. Narayana Prasad Padhy, Director, MNIT Jaipur and Director, IIIT Kota, is a Professor (HAG) of Electrical Engineering and has served as Dean of Academic Affairs, IIT Roorkee, Founder Head Mehta Family School of Data Science and Artificial Intelligence, Professor In-Charge Training and Placement. NEEPCO. and Institute Chair Professor IIT Roorkee. at Dr. Padhy is a prolific researcher in the area of Power Systems Engineering and Smart Grid. He has contributed significantly to the domain by way of securing research grants, supervising scholars, publishing research articles, writing books, securing patents, laboratory development and developing online **NPTEL** courses. Dr. Padhy has held visiting positions at eminent international universities and established research engagements and institutional tie-ups with these universities. He has collaborated with top industries and government agencies for research, laboratory development, and as a knowledge partner. He is well recognised in international and national professional bodies and has actively contributed in various capacities towards their growth. He also represents the country at various international research platforms. Dr. Padhy is a well awarded and honoured scholarly professional at the national and international levels.

Director

Prof. N. P. Padhy

Director, MNIT Jaipur

Prabha Bhawan, MNIT Campus J L N Marg, Jaipur-302017 director@mnit.ac.in

Dr. Narayana Prasad Padhy, Director, MNIT Jaipur and Director, IIIT Kota, is a Professor (HAG) of Electrical Engineering and has served as Dean of Academic Affairs, IIT Roorkee, Founder Head

Mehta Family School of Data Science and Artificial Intelligence, Professor In-Charge Training and Placement. NEEPCO. and Institute Chair Professor at IIT Roorkee. Dr. Padhy is a prolific researcher in the area of Power Systems Engineering and Smart Grid. He has contributed significantly to the domain by way of securing research grants, supervising scholars, publishing research articles, writing books, securing patents, laboratory development and NPTEL developing online courses. Dr. Padhy has held visiting positions at eminent international universities and established research engagements and institutional tie-ups with these universities. He has collaborated with top industries and government agencies for research, laboratory development, and as a knowledge partner. He is well recognised in international and national professional bodies and has actively contributed in various capacities towards their growth. He also represents the country at various

Dr. Padhy is a well awarded and honoured scholarly professional at the national and international levels.

research

platforms.

#### **Director Office:**

international

Shri Madhu Sudan Sharma (PS to Director)

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Registrar

Prof. M. M. Sharma

Registrar, MNIT Jaipur

Prabha Bhawan, MNIT Campus, JLN Marg, Jaipur-302017 +91 141-2529078 registrar@mnit.ac.in

#### **Deans**

Prof. Jyotirmay Mathur Dean of Academic Affairs

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Prof. Rakesh Jain
Dean of International and Alumni Affairs

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Prof. Kailash Singh Dean of Faculty Welfare

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Prof. Gunwant Sharma Dean of Research & Consultancy

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Prof. Mahesh Kumar Jat Dean of Students Welfare

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Prof. Vineet Sahula Dean of Digital Infrastructure & Services

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Prof. Upender Pandel Department of Metallurgical & Materials Engineering

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Prof. Kanupriya Sachdev Department of Physics

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Dr. Bhagwati Sharma Materials Research Centre

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Prof. S. D. Bharti National Centre for Disaster Mitigation & Management

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Ar. Ram Niwas Sharma Professor In-charge, Architecture

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Prof. D. Boolchandani Professor In-charge, Training and Placement

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Prof. Vijay Janyani Professor In-charge, CDEC

pi.cdec@mnit.ac.in Prof. Raj Kumar Vyas Chairman, House Allotment Committee

chairman.hac@mnit.ac.in

Dr. Rohit Bhakar Coordinator, Institute Purchase Committee

coordinator.ipc@mnit.ac.in

Dr. K. Palpandi Coordinator, SC/ST Cell

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Dr. Preeti Bhatt Coordinator, Women Cell

coordinator.wc@mnit.ac.in

Dr. Subbaramaiah V Coordinator, OBC Cell

coordinator.obccell@mnit.ac.in

**Chief Vigilance Officer** 

DO NOT PAY BRIBES. IF ANYBODY OF THIS OFFICE ASKS FOR BRIBE OR IF YOU HAVE ANY INFORMATION ON CORRUPTION IN THIS OFFICE OR IF YOU ARE A VICTIM OF CORRUPTION IN THIS OFFICE, YOU CAN COMPLAIN TO THE HEAD OF THIS DEPARTMENT, OR THE CHIEF VIGILANCE OFFICER / THE SUPERINTENDENT OF POLICE, CENTRAL BUREAU OF INVESTIGATION AND THE SECRETARY, CENTRAL VIGILANCE COMMISSION".

All complaints to the Central Vigilance Commission may be made in terms of its 'Complaint Handling Policy' which is available in public domain on the Commission's website i.e., <a href="www.cvc.gov.in">www.cvc.gov.in</a>. Complaints can also be lodged online on Commission's website.

Head of the Institution

Prof. N. P. Padhy

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JLN Marg, Jaipur-302017
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**Chief Vigilance Officer** 

Prof. G. S. Dangayach

Professor-HAG

Dept. of Mechanical Engg.,
MNIT Campus,
JLN Marg, Jaipur-302017

cvo@mnit.ac.in

**Finance Committee** 

#### Chairman

## Prof. N. P. Padhy

Director, Malaviya National Institute of Technology Jaipur (Rajasthan)

**Ex-Officio Member** 

## Prof. N. P. Padhy

Director, Malaviya National Institute of Technology Jaipur (Rajasthan)

Ex-Officio Member

## Special Secretary/Additional Secretary/Joint Secretary

dealing with Technical Education, Department of Higher Education, Ministry of Education (Shiksha Mantralaya)

**Ex-Officio Member** 

### **Financial Adviser**

Department of Higher Education, Ministry of Education (Shiksha Mantralaya)

Member

### **Member Nominee**

(to be nominated by BoG)

Member

#### **Member Nominee**

(to be nominated by BoG)

Secretary

#### Prof. M. M. Sharma

Registrar (I/C), Malaviya National Institute of Technology Jaipur (Rajasthan)

**Building & Works Committee** 

### Chairman

## Prof. N. P. Padhy

Director, Malaviya National Institute of Technology Jaipur (Rajasthan)

Member

## The Director (NITs)

Department of Higher Education, ME

**Nominee** 

BoG

**Nominee** 

JVVNL, Jaipur

Nominee

**CPWD** 

## Prof. G. S. Dangayach

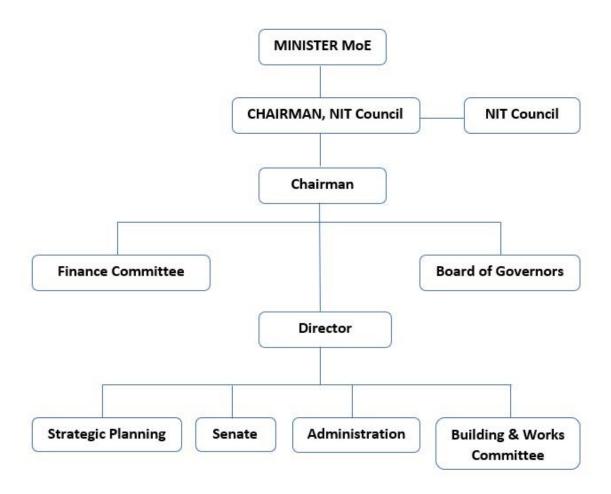
Malaviya National Institute of Technology Jaipur (Rajasthan)

Ex-Officio, Member Secretary

## Prof. M. M. Sharma

Registrar (I/C), Malaviya National Institute of Technology Jaipur (Rajasthan)

#### ADMINISTRATIVE HIERARCHY OF MNIT JAIPUR



#### Office Administration

Mr. Bhurendra Singh
Deputy Registrar
Hostel Office
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Mr. Raj Kumar Manjhiwal
Deputy Registrar
Establishment, Legal and Dean FW
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Dr. Reetu Singh Deputy Registrar Student Welfare dr.sw@mnit.ac.in

Dr. Suman Rathore Deputy Registrar

Academics dr.acad@mnit.ac.in

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Mr. Birbal Singh Assistant Registrar Academic Section ar.acad@mnit.ac.in

Mr. Kushagra Chaturvedi Assistant Registrar Faculty Welfare Section & Meetings kushagra@mnit.ac.in

Mr. Manish Yadav Assistant Registrar Estate Section ar.estate@mnit.ac.in

Mr. Rajkumar Dube
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### Mr. Surya Prakash Sonwani Assistant Registrar

Establishment, Legal, RTI, CVO, HAC, SC/ST, OBC & Women Cell <a href="mailto:suryasonwani@mnit.ac.in">suryasonwani@mnit.ac.in</a>

Mr. Tapas Gupta
Assistant Registrar
R & C Section, MAC, TAC, RAC, CDEC, MIIC and EICT Academy
tapasgupta@mnit.ac.in

#### Student's Welfare

#### **About DSW**

Students are the most integral part of any institution, therefore it is our top most priority to provide a healthy, safe and sound environment to them here at the campus so that they continue to grow and excel holistically without any hindrance. The force that works tirelessly to accomplish this mission is led by the Office of Student Welfare.

#### **Key Tasks of Dean Student Welfare Office**

- 1. Registration of the newly admitted UG students in academic session 2022-23
- 2. Orientation program for fresh entrant students.
- 3. Student Identity Card
- 4. Coordinating Anti-Ragging activities
- 5. Coordinating Cultural activities of the students.
- 6. Coordinating Technical Societies at Institute and department level and Funding support for participating in external technical events.
- 7. Coordinating and organizing activities related to MoE Flagship Programmes.
- 8. Preparing Student magazine.
- 9. Unnat Bharat Abhiyan program.
- 10. Issuance of Student Insurance & Character Certificate
- 11. Managing all scholarships for UG, PG, and PhD (except institute assistantship).
- 12. Maintain Discipline, Wellness & Welfare of Students.

- 13. Financial assistance to students, travel grants, and education loans.
- 14. Providing railways concession.
- 15. Managing hostel accommodation and messing facilities for students residing in the campus.
- 16. Providing sports facilities for students and staff by organizing indoor and outdoor games and providing fund support for participating in external sports events.

### People

- Administration
- Staff

Prof. Mahesh Kumar Jat Dean of Students Welfare dean.sw@mnit.ac.in +91-141-2715039, 2713316

Dr. Harlal Singh Mali Associate Dean (Students) ad.sw.students@mnit.ac.in

Dr. Sushant Upadhyaya Associate Dean (Mess) ad.sw.mess@mnit.ac.in

Dr. Dinesh Kumar Associate Dean (Sports) ad.sports@mnit.ac.in

Dr. Prerna Jain Associate Dean (Cultural) ad.sw.cultural@mnit.ac.in

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Coordinator (Wellness)
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Dr. M. L. Meena
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Coordinator (Technical Societies)
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Dr. Swati Sharma
Coordinator (Indoor Games)
coordinator.sports.indoor@mnit.ac.in

Dr. Hemant Kumar Meena Coordinator (Outdoor Games) coordinator.sports.outdoor@mnit.ac.in

Mr. Sangeeth S Pillai
Coordinator (Student Magazine)
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Staff:

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Mr. Anil Kumar Mathur Assistant Registrar ar.sw@mnit.ac.in

Ms. Kiran Rathore Superintendent (SG-II) kiranrathore.adm@mnit.ac.in

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Mrs. Simi Choudhary Senior Assistant simi.hum@mnit.ac.in

Mr. Suwa Lal Ola Senior Assistant suwalalola@mnit.ac.in

## **Cultural Society**

Cultural Society of the institute is an umbrella that shelters numerous clubs and societies. The motto is to facilitate and promote opportunities as well as platform for students to prove their mettle and to explore their passion through a plethora of interactive and innovative events. Participating in cultural pursuits helps you become more well-rounded and ready for the real world. They aid in students' sense of belonging to the Institute and help them grow professionally and personally by honing abilities including planning, public speaking, and teamwork. Operating with an able team of students with the guidance of faculty, Cultural Society organizes an array of events continuously throughout the year with endeavors by hosting nineteen active clubs that meet regularly throughout the year. Namely, these clubs are:

- 1. Classical Music and Dance Club
- 2. Creative Arts Club
- 3. Dance Club
- 4. Debating Club
- 5. Drama Club
- 6. English Language Activities Club
- 7. English Press Club
- 8. Film Making Club
- 9. Hindi Language Activities Club
- 10. Hindi Press Club
- 11. Music Club
- 12. Photography Club
- 13. Poetry Club
- 14. Think India
- 15. NSS
- 16. Travel and heritage visit Club
- 17. Electoral Literacy
- 18. Quiz Club MNIT
- 19. The Mavericks MNIT

#### Upcoming events

1. Blitzschlag "A Paranoid To Paradise" 2023 (9th – 12th Feb 2023)

#### Concluded events

- 1. Celebration of Mahamana Pandit Madan Mohan Malaviya Jayanti 25th December 2022
- 2. Mohiniyattam Classical Dance presented by MNIT in collaboration with SPIC-MACAY(Jaipur Chapter)**November 26, 2022**
- 3. Freshers' Orientation Programme, 2022 at MNIT JaipurNovember 06-08, 2022
- 4. Yusuf Khan's Bhapang Vadan presented by MNIT in collaboration with SPIC-MACAY(Jaipur Chapter)**October 10, 2022**
- Har Ghar Tiranga Campaign at Malaviya National Institute of Technology 11-15 August
   2022

- 6. Azadi ka Amrit Mahotsav (AKAM) 11 15 August 2022
- 7. Annual Athletic Meet 2022 8 10 April 2022
- 8. Yoga Tournament 2022 22nd March, 2022
- 9. Republic Day 2022 26th January, 2022
- 10. Youth Fest 2022 13th 15th January, 2022

Blitzschlag 2023

#### Date - 9th to 12th Feb 2023

BLITZSCHLAG, "A Paranoid to Paradise", MNIT's Annual Cultural Festival launched in 2005, also widely known as 'Blitz' has a decade-long glorious history. It is synonymous throughout Rajasthan as a whole- some carnival, due to its unparalleled grandeur making it a 2nd Largest Cultural Fest of Rajasthan.

Every year, Blitzschlag brings together innumerable students from all over India, presenting an unforgettable opportunity to savour all the cultural enjoyment it can accommodate. It is a moment of immense pride for us to announce "Blitzschlag'23 from 9th Feb – 12th Feb 2023. The largest college Cultural Fest in Rajasthan, with a remarkable footfall of over 30,000, BLITZSCHLAG has a plethora of events and cultural competitions from singing to classical dance, to Nukkad Natak and emulations of Dali. This fest escalates the euphoria of the participants to its pinnacle. Topping the benchmark set by precedent years. BLITZSCHLAG keeps revamping each year, perpetually raising the standards of the event. Prominent national speakers, amazing artists who elevate cultural enthusiasm, evenings where a sense of belonging suffuses the atmosphere, we've seen it all. Flagship Events such as Panache, Ramba Samba, Blitz got Talent and Battle of Bands are lined up to spark party fever. This extravaganza has been rightly called a cultural bonanza, spreading its wings

Moreover, BLITZSCHLAG infuses social awareness among the young citizens of the country, thus fulfilling its responsibility to foster society's well-being, with a persistent focus on giving back to the community which has fostered it. Blitzschlag has had successful partnerships with ONGC (Title Sponsor), VIVO, Bajaj, Hero, Honda, ALLEN, Coca Cola, Lakme, Airtel, RayBan, Saras, JSW Steel, BSNL, ICICI Bank, Zee News, Rajasthan Patrika, Dainik Bhaskar, DNA, etc. Blitz has hosted prominent stars such as KK, Armaan Malik, Ankit Tiwari, and Javed Ali in its pronites, which are a huge hit throughout the country.

#### **Events**

• Flagship Events

- Club Events
- Cultural Events

#### **Battle of Bands**

Inter-college Musical band competition. The Battle of Bands is the most awaited celebration of culture, aiding young minds to delve into music and the traditions associated with it. Renowned musical bands grace the stage and plug in some soulful magic through their cords. Judged by a panel of distinguished artists, the band that strums magic through their strings and makes one hymn to their beats wins the battle!

#### Ramba Samba

It is a grand inter-college dance competition which is one of the main events being organized in Blitzschlag year after year. The dance competition invites the best dancing troops across the country to flaunt their moves. It is open for all dance forms.

#### **Panache**

A grand inter-college fashion show competition organized by the Cultural Society.

#### **Blitz Got Talent**

Talent hunt competition- where the participants will showcase their unique talents in various fields. It is organized by the Cultural Society.

Club events:

Dhun

Classical Music and Dance Club, Music Club

Music gives a soul to the universe, wings to the mind, flight to the imagination and life to everything. And its time for a showdown of the soul of music, instruments. Music Club and CMD Club brings Dhun, a Solo Instrumental Competition which enjoys enormous participation from all across the country. In a world full of music and camaraderie, its time to get your friends and go head-to-head against some of the most insanely talented instrumentalists. Come join us in this rocking and musical fiesta and immerse yourself in the phantom sphere of Blitzschlag.

**Voice Choice** 

**Classical Music and Dance Club, Music Club** 

Music is the shorthand of emotion. It has the ability to take people out of themselves for a few

hours. Music Society and the Classical Music & Dance Club is delighted to announce Voice Choice,

a Solo Singing Competition. It is a perennial event which enjoys immense participation from all

across the country. So put your best foot forward, and immerse yourself in the phantom sphere of

Blitzschlag.

Nrityanjali

**Classical Music and Dance Club** 

Dance is poetry with arms and legs, its an art form that communicates through gestures set to

musical notes. Blitzschlag 2023 presents Nrityanjali, an opportunity to showcase your classical

dance skills. So, put your best foot forward and dance like its your last performance

**Motif-Filion** 

**Creative Arts Club** 

A doodle is a drawing made while a person's attention is occupied. Doodling can have concrete

representational meaning or may just be composed of random and abstract lines or shapes. We

present to you a Doodling competition where participants will be provided with sheets and markers

and will have to doodle on them on the basis of the theme.

Art Exhibition

**Creative Arts Club** 

Art brings together so many of our inner passions. The brilliance of artists humbles everyone.

Artworks and models will be exhibited and the best three artworks will win prizes worth INR 6000!

You are free to send your artworks made using any medium.

#### Line Art Creative Arts Club

"Everything is connected", Von Humboldt acclaimed. To put it in terms of art, by learning how not to lift the pencil off the paper until the drawing is complete, you are able to focus on hand-eye coordination and relaxation techniques which helps you achieve more natural-looking results in future pieces of artwork. To appreciate this concept, the Creative Arts club is organising LINE ART competition

## Tint-a-Top Creative Arts Club

Get your creative minds ready and spread the colors of your imagination on the canvas of a T-shirt as creative arts club gives you the perfect opportunity to showcase your fashion mantra in the T-shirt painting competition. Turn on your colourful, creative pulses and show what your style mantra is all about! Explore the horizon of creativity and experience, the fun and pride by wearing a self-designed T-shirt. A T-Shirt Painting Competition where you will be provided with the materials required and there won't be any theme and you will be free to paint on the t-shirt from your imagination.

#### Rang de Mukhra Creative Arts Club

The Creative Arts Club is hosting an entertaining contest for you all. Rang de Mukhra, sounds fun right? trust me, it's more than that. You'll know it once you're there, so pick up your brushes and be there and join us. The participation will be done in a team of 2 members. Theme will be given by picking up the chits.

## Fashionista Creative Arts Club

Fashionista is here- the most fashionable show of BLITZSCHLAG where you can explode the box of creativity to put together the craziest fun outfits and captivate all EYES on YOU! ♣ A Fashion

Competition will be held where you will participate in the fashion walk in costumes designed by you. The walk will be of minimum 4 Minutes and maximum 6 Minutes with a background music produced by the teams.

## Animation Workshop Creative Arts Club

The Creative arts club presents the most awaited ANIMATION WORKSHOP for beginners. All you need is your laptop and enthusiasm to be a part of this exciting event which is just one registration away, so seize the chance and be there on time. A Speaker will come to teach basic animation and then on the same day an animation Competition will be held. Participants will have to bring their own laptops and the software will be provided in the workshop to download.

## Visuality Creative Arts Club

"Visuality"; See the world through the eyes of an Artist.... Have you ever come across a scene or view that appealed to your eyes so much that you thought of capturing it. Then The Creative Arts Club of MNIT is here to give you the opportunity to show your creativity in an event of live sketching and showcase it in a way you see and perceive through art. Come and unlock the Pandora box of your creativity and talent and join us in this live sketching event. A Live Sketching event will be held at an open place in the campus.

### Magazine Collage Creative Arts Club

A collage is a visual representation made from an assembly of different forms, materials and sources creating a new whole. A collage may include newspaper clippings, ribbons, bits of colored or hand-made papers, portions of other artwork, photographs, and such, glued to a solid support or canvas. Participants will have to make a cover page collage for a theme based magazine. Theme will be provided on the spot. Materials will be provided.

## Origami Creative Arts Club

Twist, turn and fold the papers and you can have a beautiful world around you with origami. Creative arts club is holding an origami competition where you can show your creativity in this unique Japanese paper folding art. Join us in this fun war of folds. Participants will be given a base and origami papers and will be asked to create a scene or a story with them.

## Picaso-no-Oculus Creative Arts Club

You might have heard of Blindfold Games such as Pin the tail of a donkey, but you will be surprised if we tell you that you can do blindfold painting. Creative Arts Club brings you an interesting art event at BLITZSCHLAG 2023. A blindfold Competition will be held where participants will form a team of 2 members where the teams will compete with each other in a game where one of team member will have to draw a chit and draw the same thing on the board where the other team members will have to guess the thing.

## Hit the Street Dance Club

It is an grand inter-college dance battle for group dancers which is one of the events being organised by the Dance Club. We are inviting the best teams of all the colleges to show up their dance moves and win prizes. Teams of all the dance forms(except classical form, there is separate competition for that) are allowed to perform.

### Break Free Dance Club

It is a solo/duet freestyle dance competition that is organised by Dance club. An inter college competition which will be judged by the judges and prizes will be provided to the winners and runner

up of the event. All forms of dances are welcomed (except classical, we have separate competition for that)

## Catch the Hook Step Dance Club

As the name suggests, Catch the Hook Step is an amusing event in which a series of Bollywood songs will be played and the participants have to showcase the hook moves. Being judged by the audience, whoever does all the moves correctly, will win the round and will be qualified for the further rounds.

## Clashing Views Debating Club

The Clashing View will be a debating competition organised by Debating Club of MNIT. The speakers will be allowed to put forward their views on topic already known to them. After all the speakers have finished speaking, those speaking for and against the motion will be seated separately, and will be allowed to have a free discussion where participants can put arguments as well as counter other arguments. The winners will be decided based on the above activity.

## Rangbhoomi Drama Club

Life is a theater set in which there are but few practicable entrances. We all have been dramatic in our life, acting in each emotion; be it love, hate, anger, or joy. Now it's time for you to put some life on stage - Life that is created by a writer, managed by a director, and lived by an actor. It's not only about acting, script, dialogues, and lights; rather, it's about you living that character on stage that brings life to the audience. It is organized by the Dramatics club.

Tamasha Drama Club Nukkad Natak is an drama performed on street to create social awareness, it's an old tool through which lot of social awareness campaign have gained strength such as family planning girls education, child labour, etc.

Monologue competiton
Drama Club

In theatre, a monologue is a speech presented by a single character, most often to express their thought aloud, though sometimes also to directly address another character or the audience.

Twist A Table English Language Activities Club

Join us for a unique and captivating evening as we bring classic tales to life with a twist! Come ready to recite or enact your favorite fairytales with an astonishing twist, and get ready to be transported into a world of imagination and wonder. Whether it's a fresh take on 'Cinderella' or a new spin on 'The Three Little Pigs,' the possibilities are endless. Show off your creative flair and bring your favorite characters to life as you take to the stage and wow the audience with your surprising retelling. So, grab your script, brush up on your acting skills, and get ready for an unforgettable night of storytelling. Register now to secure your spot and become a part of this exciting and imaginative event!

Raise the Curtain English Press Club

The participants have to raise the curtain on their news report writing skills by recounting an event in their life from a first or third person point of view and report it in the form of news. Eg: reporting about the time they fell down in a running race from their mother's point of view; reporting about the time they recieved their JEE results, etc.

Seek the Truth English Press Club The club shall report the news as reporters and try to convince the audience into believing a fake news piece and an eccentric real news piece, and then try to get the audience to guess which one of the two is true. This will be a buzzer round conducted in groups where each team has to differentiate between the presented fake and real news and uncover the truth. Each team will compete against another for points to finally become the winner.

## MNIT Film Festival Film Making Club

International short film-making competition is a 4-day long event organized by the Film Making Club.

## Show a reel Film Making Club

The participants will have to make reels during various Blitzschlag events showcasing the beauty of this fest, organized by the filmmaking club.

## Celebrity Show Off Film Making Club

Celebrity Show Off is a event where you should try to be our favourite celebrity by using their dialogue delivery and body language. This event will showcase yours passion towards films.

## Hustle n Bustle Music Club

Kya Bolti Public! It's time to take you to the coolest form of music ever as Music Society brings the premier beatboxing competition 'Hustle Bustle', an event encapsulating an art form that is both fascinating and mesmerizing. For the unversed, beatboxing refers to a kind of vocal music that employs various vocal techniques to imitate drums and other instruments. It's fun, engaging and an

awesome way to express yourself. So, get out of your box and voice your love for beats, register for

'Hustle Bustle' and show your talent to everyone!

Gungunaate Chalo Music Club

You listen to songs all day on repeat and wonder whether you will ever get to use all this music

knowledge in your life. If that's your story, then fikar not! Music Society brings GUNGUNATE CHALO,

a fun and exciting competition in which the background music of a song will be played for 15-20

seconds and the participants will have to guess the song and continue it. So what are you waiting

for? Bring along your friends, have fun while guessing songs, and have a chance to win exciting

prizes!

Moments

**Photography Club** 

They say Photography is the pause moment of life. Photography Club organising an exciting event

for you, 'Moments'. It is an International level Photography Contest cum Exhibition. So bring your

inner photographer to the surface. Capture the moments and stand a chance to win prizes worth

upto Rs. 35,000.

Bhaavna

**Photography Club** 

Bhavana is a photography competition that is based on capturing emotions during the whole fest.

The photography club will organize this event.

**PicSaga** 

**Photography Club** 

It is a competition in which participants will depict a story from the set of images clicked, which will be arranged in chronological order and organized by the photography club.

Snip & Stitch
Photography Club

You will be given 4-5 photos, and using Adobe Photoshop, you have to make one singular meaningful photo, merging all the given photos. It is organized by the Photography Club.

Photography Workshop Photography Club

We always felt after clicking picture that something is missing in picture, isn't it? Learn it from PROFESSIONAL How to click a perfect Picture!Photography club presents 'Photography Workshop' for you. In collaboration with professional street photographer & Cinematographer Vinay Rachhewar aka 'gareebtraveller', an internet sensation with more than 80k followers. Learn from his Experiences & Journey. He will assist you by offering photography advice and outlining of his career path that led to him a successful photographer. Sign up right now for the workshop.

Arz kiya hai Poetry Club

In a world full of chaos and noise, let's awaken the writer in us and boost the aura of the cosmos. One of the most intriguing, endearing, and brilliant poetry competitions, 'Arz Kia Hai' is being organized by the Poetry Club of MNIT Jaipur. Come up with creative, distinctive writeups and 'BRING UP THE WRITER INSIDE YOU'

Exploring India Through a Dart Travel and heritage visit Club

Life without cultural and historical heritage would be like a blank page. The travel and heritage club of MNIT Jaipur presents you a fun event: 'Exploring India through a Dart' to test your knowledge about heritage through a fun quiz. But there's a catch, instead of conventional quiz game the questions your are going to answer will be decided by a dart game. So Get ready to have fun and win exciting prizes along with it. Mark your presence and make the event successful, remarkable and memorable.

### Youth Parliament Electoral Literacy

Replica of parliament as done by the government. It is a debating contest organized by the Electoral Literacy Club.

## **Qryptic Quest Quiz Club MNIT**

Unlock your inner Sherlock to solve puzzles, answer riddles, find the hidden objects, and more of the like in this event.

## 22 Yards Ouiz Club MNIT

This competition comprises 2 rounds, Round 1 is a quiz based on IPL. Teams clearing this round will proceed to round 2, Round 2 is an auction round that mimics the actual IPL Auction that is held on the next day.

## Bharat Darshan Quiz Club MNIT

Quiz competition based on the intangible and tangible heritage of India. The questions would encompass built heritage, performing arts, crafts, and natural heritage of India.

### Flix and Chill Quiz Club MNIT

A fun and unconventional quiz competition based on web series, TV shows, Hollywood, Bollywood, and regional cinema.

### Quiz Pro Quo Quiz Club MNIT

A pot-pourri of everyone's favourite trivia shows like Bournvita Quiz Contest, Kaun Banega Crorepati, and Jeopardy, this event is a multi-round general knowledge quiz competition.

## What's on your bookshelf? Quiz Club MNIT

Quiz competition based on all-time works of literature from Shakespeare to JK Rowling and everything in between.

## Around the world in 80 questions Quiz Club MNIT

A world tour masquerading as a travel quiz.

## Hello Mr.Musk Quiz Club MNIT

A quiz that tests your knowledge from the world of Business. Questions will be based on business news and events, trade, commerce, and finance.

# Acta Diurna The Mavericks

ACTA DIURNA is back to take you amidst all suspense and thrill. In this event, you are served with a mind-tossing murder mystery with all its characters and hints. You, being a journalist/detective, are trying to solve the mystery by asking your queries from the characters of the plot enacted by us.

# Bolti Tasveere The Mavericks

Bring on your creativity and spun a story or a poem around a set of pictures given to you. Participants will have a couple of pictures to start with and will be given a couple more in between the clock to weave them together with their already written write-up. Judgment will be based on your creativity and out-of-the-box thinking.

# Family Feud The Mavericks

Join us for an evening overloaded with fun and excitement with our very own version of the popular game show 'Family Feud'! Just like on the show, two families take turns trying to guess the most popular answers to survey questions. The host presents a survey question, such as 'Name something you put on your pancakes,' The first family has a set amount of time to come up with as many answers as possible. Each answer is worth a certain number of points. The family with the most points at the end of the game wins. But wait, there's more! In addition to the main event, we will also have exciting prizes for the audience. Whether you're competing or just spectating, there's something for everyone to enjoy. So gather your friends, team up, and get ready to feud! This event will be a memorable evening filled with laughter and friendly competition. Don't miss out - we hope to see you there

#### **Cultural events:**

#### **Treasure Hunt**

Treasure hunt is a game in which each team attempts to be the first in finding something that has been hidden all across the campus using clues. Guessing the first clue leads to the next spot as the game continues, and the final clue leads to the ultimate hidden treasure. The winning team will be

awarded with alluring rewards. The game for the Sherlocks amongst the crowd, Treasure Hunt is for

all the Mystery solvers out there .

**Escape Room** 

Escape room is for braves, in which people are locked up in enclosures wherein they play a game

involving to solve a series of puzzles and riddles. Within a certain amount of time the goal of each

team is to be out of that closed compartment, after solving the riddles one by one to find the key to

unlock the room. The first one to be out will be given exciting prizes and goodies.

**MNIT Radio** 

"TV gives everyone an image, but Radio gives million images in zillion brains" If you are a visionary,

self-assured, passionate, energetic, and a captivating performer then this is your time to shine. MNIT

brings up a platform for you to exhibit your talent ,to showcase your stage presence,to awaken the

artist within you, to make your talent come out with flying colours and to open up new horizons for

your creativity. The "MNIT Radio" undoubtedly is going to open up opportunities and an arena for

you to showcase your out your talent. Register to "Bring Up the Artist Within You."

**Blitz Talks** 

A Platform where experts come and guide folks by sharing their experience.

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**Science & Technology Society** 

The Science & Technology Society of the institute is an umbrella that shelters numerous clubs and societies. The motto is to facilitate and promote opportunities as well as a platform for students to prove their mettle and explore their passion through a plethora of interactive and innovative events. Participating in technical pursuits helps you become more well-rounded and ready for real-world problems. They aid in students' sense of belonging to the Institute and help them grow professionally and personally by honing abilities including planning, developing, and teamwork.

Operating with an able team of students with the guidance of faculty, Science & Technology Society organizes an array of events continuously throughout the year with endeavors by hosting eleven active clubs that meet regularly throughout the year. Namely, these clubs are:

- 1. Data Science (TENSOR)
- 2. Computer Science (MATRIX)
- 3. Robotics Club
- 4. Aeromodelling Club
- 5. Astronomy Club
- 6. Economics and Finances Club
- 7. Technical Communication house
- 8. Tinkering Lab (IDEATE INNOVATE CREATE)
- 9. Consultancy Club
- 10. Infosec
- 11. Entrepreneurship

### **Clubs**

MNIT Science & Technology Society lays out a comprehensive student-friendly platform for the exploration of talent, enhancement of leadership skills, and teamwork. It encourages the students to exhibit their technical abilities through participation in various events that are organized throughout the semesters. These clubs also help students to increase their technical knowledge so that they can implement them to build new projects with innovative ideas. The best entries of each showcased in technical (SPHINX). event the annual fest are The various active clubs that meet regularly throughout the year and working under Technical Society are as follows:

# **Data Science (TENSOR)**

The major goal would be to increase campus awareness of data science. Students that are generally interested in various facets of data mining, predictive modelling, big data, and data visualisation should join this group. can have a variety of verticals, including as blockchain, machine learning, and artificial intelligence. Lectures, workshops, conversations, practising through skill-building exercises, and competition preparation are all examples of activities.

#### **Computer Science (MATRIX)**

The emphasis would be on instilling an applied computer science culture in students. Combine coding for out-of-the-box solutions, resulting in a comprehensive environment for learning and practising the concept formulation, design, development, and operation of APPS and GAMES. Learning through workshops, lectures, and team participation in hackathons, Capture-The-Flag Competitions (CTFs), and other competitions. Also, if necessary, to assist various deaneries with various tasks.

#### **Robotics Club**

Attempts to pique the interest of the institute's students in robotics. The club would serve as an active platform for students to demonstrate and improve their practical machine building skills and knowledge.

However, the club offers much more to its members than just technical advancement; from teamwork to cooperation, from perseverance to sincerity, the club teaches you a wide range of interpersonal skills that are essential in everyday life. Create robots for educational purposes. Workshops for learning about machine building, competing in national and international events, or simply for fun.

### **Aeromodelling Club**

Aeromodelling is a group for aviation enthusiasts who have a natural desire to fly. Aeromodelling is a work of art in which engineering and creativity combine to create sophisticated flying systems. Because of the enormous scope of creativity and interdisciplinary nature, it allows a person to develop a complete system with people from various departments and specialisations. Activities would include learning through lectures, workshops, and discussions, practising through skill development tasks, and preparing for competitions.

#### **Astronomy Club**

Desire to spark interest and raise awareness in the fields of astronomy and space research. Great place for those interested in the fundamental questions of the universe, as they are answered through theories of quantum physics and relativity, or for those who simply enjoy looking at the beautiful night sky and heavenly bodies that have captured human imagination for centuries. Club members organise lecture sessions, discussions, and observation sessions (using telescopes), build their own telescopes and rockets, live stream observable astronomical events, and participate in a few competitive events throughout the year.

#### **Economics and Finances Club**

By giving keynote sessions, seminars, offering information, and planning various competitions for the students, the club hopes to increase economic and financial understanding and promote finance as a rewarding career option. To take advantage of the opportunities brought about by the rapid growth in this era of digitalization, one needs to possess the necessary domain knowledge and skills. These include the ability to understand basic financial statements as well as capital markets, corporate finance, econometrics, the art of investing, and developing trading ideas. The club would stay active by disseminating educational material via the stock of the month series, a weekly knowledge poster, and the performance report, organising keynote sessions and talk shows for people who are interested in finance and economics but lack prior knowledge, and organising a variety of educational and entertaining competitions.

#### **Technical Communication House**

The goals of this club are to increase interest in technical communication and to encourage students' professional development in technical communication. The club would organise informational meetings, training sessions, and speakers, as well as Job Site Excursion trips to visit companies and compete in various competitions. The club would publish a science and technology journal for the MNIT student body.

# Tinkering Lab (IDEATE INNOVATE CREATE)

Tinkering Lab would be a place where innovative ideas could be transformed into engineering genius. A perfect solution would be provided for a relevant problem statement. With the goal of encouraging innovation, an environment for learning, developing, and intellectualising various scientific ideas can be created through the use of experimentation. Ideas in broad domains, primarily for the benefit of society/environment/institute initiatives, such as Clean Energy, Water Conservation and Management, Smart Mobility, and Sustainable Development Goals, could be submitted. MNIT Facility/Faculty Lab could provide a platform for developing the best idea.

### **Consultancy Club**

A student-run consulting firm wants to benefit local businesses while also giving students access to practical consulting experience that will help them land consulting jobs. To facilitate the conduct of case studies during the many fests conducted on campus. To offer workshops to raise knowledge about a profession in consulting and potential avenues to enter into consulting.

Infosec

If you enjoy discovering and exploiting security flaws, InfoSec is the field for you. It is a group of

security enthusiasts, newbies, script-kiddies, and ethical hackers. The learning process is being

continued through lectures, workshops, and practical learning through some tasks. Can perform

well in events such as Microsoft Build the Shield (BTS) and the Deloitte Collegiate Cyber Threat

Competition (CCTC).

Entrepreneurship

The purpose of the entrepreneurship club is to foster among the students the spirit of

entrepreneurship. The club would host a variety of events to foster entrepreneurship among the

student body, including workshops, informal sessions (sessions that will be interactive, such as

case study sessions, stock market analysis, etc.), site visits where students can spend time with

entrepreneurs, CEOs, and founders of large corporations for a day, events like "Startup Bootcamp"

and "The First Pitch," online guizzes, and mock interviews.

People

Dr. Nisha Verma

**Coordinator (Technical Societies)** 

Dr. Ashish Kumar Tripathi

**Faculty Advisor, Data Science (TENSOR)** 

Dr. Deepak Ranjan Nayak

Faculty Advisor, Data Science (TENSOR)

Prof. Vijay Laxmi

Faculty Advisor, Computer Science (MATRIX)

Dr. Jyoti Grover

Faculty Advisor, Computer Science (MATRIX)

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Dr. Nikhil Sharma Faculty Advisor, Robotics Club

Dr. Manjinder Singh Faculty Advisor, Aeromodelling Club

Dr. Manish Kumar Faculty Advisor, Aeromodelling Club

Dr. Kavita Lalwani Faculty Advisor, Astronomy Club

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Dr. Abhishek Tripathi
Faculty Advisor, Technical Communication house

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lo.	Scholarship	Total Parental Income (Rs)	Academic and Other Eligibility Criteria	Category	Scholarship	riocedule loi Application	
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	National Fellowship and Scholarship for Higher Education of ST students (CSSS Top Class ST students)	Upto 6.0 lacs per annum	ST student who secure admission in NIT, the inter-seniroty merit will be based on the percentage marks obtain in the qualify examination JEE Adance	ST	for the entire	Students shall apply through the scholarship online portal:-http://scholarship.gov.in within the cut of date.	1. T school awar con courto so per the con elig School sha ention other school the school awar the school be a " Fii
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Minority Communities. (Ministry of Minority Affairs, New Delhi)			Christian)	hosteller-Rs 10,000/- p.a.and Day-hosteller-Rs 5,000/- per annum.	scholarship in office of the Academic Section	succe command that
· ·	Upto 2.50 lakhs p.a.	Disability should be 40% or above and having a valid certificate under rules specified by competent authority	PH	Disability Allowances, Rent for hosteller Rs. 1600/- p.a. And Dayscholar Rs.	1. Apply online 2. Institute will forward online. 3. Scholarship amount will transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	1. So cont subs years depe succ complete complet

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5	lEducation for	Upto 6.0 lakhs p.a.	Disability should be 40% or above and having a valid certificate under rules specified by competent authority	PH	allowances (Hosteller:3000 per month and Dayscholar:1500 per month),	1. Apply online 2. Institute will forward online. 3. Scholarship amount will transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	state. Slots:  1. Sch conting subset years dependent of the conting precedurin precedurin precedurin state girls of minor community and that community candiffer and candiffer and candiffer state. Slots:
6	lUniversity	Upto 4.50 lakhs	1. 80 percentile or above in XII or 10+2. 2. Age 18-25 years	All	Rs 1000/- pm for first three years and Rs. 2000/- pm for fourth and fifth year (For 10 months only in each year)	Respective Board will inform to the candidates	Total schol out o 50% e for gi
7	Prime Minister's Scholarship Scheme For Central Armed Police Forces And Assam Rifles	Not Applicable	1. Ward of deceased CAPF/AR personnel. 2. Wards of deceased State police force personnel martyred in terror and naxalite violence	All	Rs. 3,000/- per month for girls and Rs. 2,500/- per month for boys	1. Apply online 2. Institute will forward online. 3. Scholarship amount will transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	Total schol out o 50% e for gi
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8	(I)enartment of	Total family income upto 8.00 lakhs p.a.	Student should belong to Jammu and Kashmir and passed 12th from state board of J & K	All	Tution fee upto 1.25 lakh per annum, Hostel fee and incidental upto 1.00 lakh	Apply in prescribed format and submit application to DSW MNIT	There schol
9	SPDC Scholarship	1- NRIs/PIOs/OCIs category - below US\$ 5000 2- Category of Children of Indian Workers in ECR countries- below US\$ 3000	For DASA admitted Students	All	All non refundable amount as per gudlines	Complete prescribe application with supporting documents and duly certified and forwarded by HOD of the institution shoule submitted within a time limit	
В-	State Governme	nt Scholarship -			<u> </u>		
1	(Rajasthan	Total family income upto Rs. 2.50 lakhs p.a.	Must have passed matriculation or higher secondary or any higher examination by recognized University/Secondary Education Board	SC/ST	Nonrefundable fee + allownaces for maintenance allowance. According to guidelines	Apply online 2. Submit application with require documents to Academics MNIT	
2	(Rajasthan	Total family income upto Rs. 1.00 lakh p.a.	Must have passed matriculation or higher secondary or any higher examination by recognized University/Secondary Education Board	OBC-BPL	Nonrefundable fee + allownaces for maintenance allowance. According to guidelines	Apply in prescribed format and submit application to Academics MNIT	1. BP with BPL N subm appli
	+		N. A. vat. la avva va a a a a d				1

3 SC/ST scholarship by Academics and submit to respective ment allownaces Rs. 2.50 lakhs examination by (Other State) state government office office p.a. recognized According to University/Secondary guidelines. Education Board All Rajasthan Mukhya Mantri Total family 50% of non-1. Th income from all bonafied NIT Apply On Line portal rajpms.nic.ac and Αll sarvajan refundable fee schol printed application should be submitted cetagory students Uchcha Shiksha sources should under head sanct

Nonrefundable

maintenance

Apply in prescribed format, get it signed Previ

fee +

Must have passed matriculation or

higher secondary or

any higher

Total family

income upto

Post Matric

	Chhatravriti	be less than Rs.		except	Addmission,	in office of theAcademic Section with	forw
	Yojana 2014	5 lakhs p.a.			tution, sports,	relevant documents	subje
					union, library,		satisf
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5	Medhavi Vidyarthi Yojna	Below Rs.6.00 lakhs p.a.	Student should from M.P. domicile and passed from 12th CBSE & ICSE secured 85% above and 12th Secondary Education Board M.P. Secured 75% and above. JEE Mains rank under 1,50,000	All	Paid fee to institute	Though online on http://www.scholarshipportal.mp.nic.in or http://www.mptechedu.org	
C- I	Public Sector Und	dertaking (PSU)	<b>-</b>				
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Scheme for Award of Engineers India Limited (EIL)  Scholarship for SC and ST Undergradute Engineering Students	Total family income upto Rs. 3 lakhs p.a.	Selection shall be made on the basis of performance in Class XII/Diploma in Engineering candidate should have 55% or equivalent CGPA/CPI in aggregate in Class XII/Diploma in Engineering.		Apply in prescribe performa annexure 1 of two page forwarded from office ofAcademic Section and submission at Head (HRD) Engineers India Limited, Engineers India Limited, Engineers India Limited, Engineers India Bhawan, EIA-3rd Floor, New Delhi-110066	Civil, Mech Elect Comp Scien Chem IT. 2. cand recei other aid a schol from source be el Awar

2	Oil & Natural Gas Corporation Scholarship for SC/ST students	Total family income Upto 1.5 lacs pa	At least 60% marks in 12th class		Rs. 48000/- per annum	application, copy of mark sheets of 12th standard or graduation as applicable, caste certificate and income certificate issued from Tehsildar or competent	Appli
3	Oil & Natural Gas Corporation Scholarship	Not Applicable	Highest CGPA in Mechanical and Chemical Engineering	AII	Rs. 60,000/- pa for one year	Awrdees are to be nominated by DSW Office on the basis of CGPA till VI semester	Toppe third Mech Chem Strea
D- I	Private Company	<i>i</i> -	1	1	1		
1	OPJEMS	Not Applicable	Top 20 rank holder students based on the rank in JEE for first year and top 20 students based on CGPA for secon, third year and final year students.		One time payment of Rs 80000/- and Medal	1. First 3 toppers of 2nd, 3rd and 4th year of four stream. 2. Final selection is based on written test and interview	Applicaward considered follow stread Engin Electric Engin 3.Me Engin 4.Me Engin
2	Scholarship	Below Rs. 2.50 lakhs	1-Three Female candidate only 2-One candidate each from Chemical, Metallurgy and Mechanical 3- Minimum CGPA- 7.0	All	Rs. 25,000/- per semester each student from 3rd to 6th semester	Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee as per MOU.	The scholl once will co the co of the subje satisfiperfo

E- Non-governmental organization (NGO) -

schol 2nd y onwa be str subje contisatisf perfe and g

The candidate may submit their typed

I1 I		Under category BPL	1. Students who have passed Class XII from a recognized board in India 2. 1st year under-graduate students.	IAII	RS. 50,000/- per	Apply in prescribed format and get forwarded from office of Dean stduents welfare Section and send to FAEA	1. Sell based acade excell (Marl and II social econd backg Final are be entire discretine Final composition of the Final
2	Sivananda Memorial	Income up to	CGPA score of at least 7.00 till qualifying examination	All	batch. (1st, 2nd, 3rd and 4th	"1. Applications will be invited by DSW office MNIT in Nov/Dec every year. 2. The selection procedure (guiding principles) for grant of scholarships shall be evolved by MNITJ as Per the rules of MNITJ"	1
3	Charitable Educational Foundation (Merit-cum-	Total family income from all sources shoule be less than Rs. 6 lakhs p.a.	For Fresh student in NIT minimum 65% marks obtain in 12th Class and for renewal more than6.5 CGPA required.	All	Scholarship Rs.15000 to Rs. 50000 per	Complete prescribe application with supporting documents and duly certified and forwarded by HOD of the institution shoule submitted within a time limit	The a applic maxir year
4	Samsung Star Schoalrship	140t Applicable	Should have passed 10th/12th from	All	armam	Complete prescribe application with supporting documents and duly certified and forwarded by HOD of the	The fi

			Jawahar Navodaya Vidhyalaya			institution shoule submitted within a time limit	taken Fundi
5	Foundation		UG student enrolled into any NIT	All	Upto Rs. 50,000 p.a., Maximum support for Rs. 2,00,000 (upto 8 semester)		
F- A	Alumni Scholarsh	nip -	.1	1			1
1	Bhargava Scholarship	income upto Rs. 3.0 lakhs	Completed III year in Elecronics and Communication Engineering	All	Rs. 15000/- per	1. Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee.	Select based acade perfroupto (Only stude year)
2	Prof. S. K. Gupta Gold Medal		Completed final year of degree program in Mechanical Engineering	All	Gold Medal and	1. Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee.	Selectory be more common the best acade performan (80% weight performan cocurractivitis) weight selectory activitis weight cocurractivitis weight selectory activitis weight cocurractivitis weight selectory activitis weight cocurractivitis weight selectory activitis weight selectory activities weight selectory
3		Below Rs. 1.00 lakh p.a.	Academic and BPL	All	Rs. 40,000/- per	Application will be invited by DSW office MNIT.2. Selection will be done by a constitute committee.	The fi decisi taken Fundi
1	1988 Alumni Scholarship	Rs 4.50 lakh	Minimum CGPA should be 7.0, first year student the criteria shall be rank in JEE (mains) examination		lanniim	Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee.	Minim should first ye the cri be ran (main: exami

Rishi Vadodaria Cultural Secretary 2020uch1464@mnit.ac.in

Pranshu Saraf Cultural Secretary 2020uec1693@mnit.ac.in

S.	Name of the	Eligibility criteria			Value of the		
S. No.	Scholarship	Total Parental Income (Rs)	Academic and Other Eligibility Criteria	Category	Scholarship	Procedure for Application	R
1	SC students (Ministry of	Total family income is up to Rs. 8.0 lakhs per annum	JEE Rank	SC	Full tution fees, Living expenses @ 3000 x 12, books grant Rs. 5000 for the entire course and one time grant Rs. 45000/- for a latest computer and accessories.	Students will be asked to apply as per their JEE ranks.	The scholonce will control the control the subject satisficients of the satisfic performance with the scholon the satisfic performance with the scholon the scholo
2	National Fellowship and Scholarship for Higher Education of ST students (CSSS Top Class ST students)	Upto 6.0 lacs per annum	ST student who secure admission in NIT, the inter-seniroty merit will be based on the percentage marks obtain in the qualify examination JEE Adance	ST	Full tution fees, Stipend Rs. 3000 per month, books grant Rs. 5000 per annum, for the entire course and one time grant Rs. 45000/- for a latest computer and accessories.	Students shall apply through the scholarship online portal:-http://scholarship.gov.in within the cut of date.	1. The schol award continuous to sat performance considered by the state of the schol shall entitle other schol the C State the schol be award available of the schol

lMinority	Upto 2.50 lakhs p.a.	recognized professional degree course or secured not less than 50% marks at senior secondary (10+2) Selection of these students will be	Minority (Muslim, Sikh, Parsi, Buddhist Jain, Christian)	whichever is less; rent for hosteller-Rs 10,000/- p.a.and Day-hosteller-Rs	1. Apply online 2. Institute will forward online. 3. Scholarship amount will transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	" First shasis.  1. Sch contil subset years deper succe comp the condurin precedurin precedurin state transfinale that common case of availar femal candithat common the constate.
-	Upto 2.50 lakhs p.a.	40% or above and having a valid certificate under	PH	Disability Allowances, Rent for hosteller Rs. 1600/- p.a. And Dayscholar Rs.	transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	1. Schoonting subset years dependent successive computer of the conduring precessive girls of minor community and transfer male
	Means Scholarship for Students Belonging to Minority Communities. (Ministry of Minority Affairs, New Delhi)  Post-matric Scholarship for Students with	Means Scholarship for Students Belonging to Minority Communities. (Ministry of Minority Affairs, New Delhi)  Post-matric Scholarship for Students with Disabilities  Upto 2.50 lakhs p.a.	Means Scholarship for Students Belonging to Minority Communities. (Ministry of Minority Affairs, New Delhi)  Post-matric Scholarship for Students with Disabilities  Means Scholarship for Students Belonging to Upto 2.50 lakhs p.a.  Upto 2.50 lakhs professional degree course or secured not less than 50% marks at senior secondary (10+2) Selection of these students will be done strictly on merit basis.  Disability should be 40% or above and having a valid certificate under rules specified by	Means Scholarship for Students Belonging to Minority Communities. (Ministry of Minority Affairs, New Delhi)  Post-matric Scholarship for Students Selonging to Minority Communities. (Ministry of Minority Affairs, New Delhi)  Disabilities  Disabilities  Disabilities  got admission in the recognized more of professional degree course or secured not solith, less than 50% marks at senior secondary (10+2) Selection of these students will be done strictly on merit basis.  Disability should be 40% or above and having a valid certificate under rules specified by competent authority	Means Scholarship for Students Belonging to Minority Communities. (Ministry of Minority Affairs, New Delhi)  Post-matric Scholarship for Students with Disabilities  Ras.20,000/- per annum or Actual whichever is less; rent for hosteller-Rs 10,000/- p.a.and Day-hosteller-Rs 5,000/- per annum.  Course fee:-Rs.20,000/- per annum or Actual whichever is less; rent for hosteller-Rs 10,000/- p.a.and Day-hosteller-Rs 5,000/- per annum.  Course fee:-Rs.20,000/- per annum or Actual whichever is less; rent for hosteller-Rs 10,000/- p.a.and Day-hosteller-Rs 5,000/- per annum.  Course fee:-Rs.20,000/- per annum or Actual whichever is less; rent for hosteller-Rs 10,000/- p.a.and Day-hosteller-Rs 5,000/- per annum.	Merit-cum- Means Scholarship for Students Belonging to Minority Communities, (Ministry of Minority Affairs, New Delhi)  Disabilities  Post-matric Scholarship for Students with Disabilitites  Disabilities  Student must have got admission in the recognized professional degree course or secured not Sikh, less than 50% marks at senior secondary (10+2) Selection of these students will be done strictly on merit basis.  Disability should be 40% or above and Students with Disabilitites  Disabilities  Disability should be 40% or above and Students with Disabilitites  Disability should be 40% or above and Students with Disabilitites  Disability should be 40% or above and Students with Disabilitites  Disability should be 40% or above and Day-hosteller-Rs 20,000/- per annum.  Course fee: Rs. 20,000/- per (Muslim, blink) (Muslim) (Musl

5	leducation for	Upto 6.0 lakhs lp.a.	Disability should be 40% or above and having a valid certificate under rules specified by competent authority	РН	allowances (Hosteller:3000 per month and Dayscholar:1500 per month),	1. Apply online 2. Institute will forward online. 3. Scholarship amount will transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	that comn case of availa femal candi that comn the continuous dependence of the continuous transfer availa femal candi that comn case of availa femal candi that comn the continuous transfer available transfer ava
6	University	upto 4.50 lakns	1. 80 percentile or above in XII or 10+2. 2. Age 18-25 years	All	Rs 1000/- pm for first three years and Rs. 2000/- pm for fourth and fifth year (For 10 months only in each year)	Respective Board will inform to the candidates	Total schol out o 50% e for gi

7	Prime Minister's Scholarship Scheme For Central Armed Police Forces And Assam Rifles	Not Applicable	1. Ward of deceased CAPF/AR personnel. 2. Wards of deceased State police force personnel martyred in terror and naxalite violence	All	Rs. 3,000/- per month for girls and Rs. 2,500/- per month for boys	1. Apply online 2. Institute will forward online. 3. Scholarship amount will transfer through DBT by the funding agency. 4. Scholarship awardee will submit documents of received scholarship in office of the Academic Section	Total scho out o 50% for g
8	Kashmir (Department of	Total family income upto 8.00 lakhs p.a.	Student should belong to Jammu and Kashmir and passed 12th from state board of J & K	All	Tution fee upto 1.25 lakh per annum, Hostel fee and incidental upto 1.00 lakh	Apply in prescribed format and submit application to DSW MNIT	Ther scho Engir
9	SPDC Scholarship	0 ,	For DASA admitted Students	All	All non refundable amount as per gudlines	Complete prescribe application with supporting documents and duly certified and forwarded by HOD of the institution shoule submitted within a time limit	
	scholarship (Rajasthan	Total family income upto Rs. 2.50 lakhs p.a.	Must have passed matriculation or higher secondary or any higher	SC/ST	Nonrefundable fee + allownaces for maintenance allowance. According to guidelines	Apply online 2. Submit application with require documents to Academics MNIT	
2	Scholarship (Rajasthan	Total family income upto Rs. 1.00 lakh	Must have passed matriculation or higher secondary or any higher examination by recognized	OBC-BPL	Nonrefundable fee + allownaces for maintenance allowance. According to	Apply in prescribed format and submit application to Academics MNIT	1. BP with BPL I subm

Nonrefundable

maintenance

guidelines

fee +

SC/ST

ment

office

Apply in prescribed format, get it signed Previ

by Academics and submit to respective

state government office

University/Secondary

Education Board

Must have passed

higher secondary or

matriculation or

Total family

income upto

Post Matric

scholarship

(Other State)

		p.a.	any higher examination by recognized University/Secondary Education Board		allownaces According to guidelines.		
4	Uchcha Shiksha Chhatravriti	i Total family income from all sources should be less than Rs. 5 lakhs p.a.	l All Rajasthan bonafied NIT	All cetagory except Minorities	tution, sports, union, library,	Apply On Line portal rajpms.nic.ac and printed application should be submitted in office of theAcademic Section with relevant documents	1. The schol sanct forward subje satisfing performan stranger of the stranger of the stranger of the stranger of the Cours
5	lMedhavi l	Below Rs.6.00 lakhs p.a.	Student should from M.P. domicile and passed from 12th CBSE & ICSE secured 85% above and 12th Secondary Education Board M.P. Secured 75% and above. JEE Mains rank under 1,50,000	ΙΔΙΙ	Paid fee to	Though online on http://www.scholarshipportal.mp.nic.in or http://www.mptechedu.org	
C- F	Public Sector Unc	dertaking (PSU)	-				
	Scheme for Award of Engineers India Limited (EIL)		Selection shall be made on the basis of performance in Class XII/Diploma in Engineering			Apply in prescribe performa annexure 1 of two page forwarded from office	1. Pur time under engin progr Civil,

Engineering Rs. 36000/- per Mech SC/ST 1 Scholarship for income upto candidate should Head (HRD) Engineers India Limited, annum Elect SC and ST Rs. 3 lakhs p.a. have 55% or Engineers India Limited, Engineers India Electi Undergradute equivalent CGPA/CPI Bhawan, EIA-3rd Floor, New Delhi-Comp Engineering in aggregate in Class 110066 Scien Students XII/Diploma in Chem Engineering. IT. 2. candi

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2		income Upto	At least 60% marks in 12th class		Rs. 48000/- per annum	application, copy of mark sheets of 12th standard or graduation as applicable, caste certificate and income certificate issued from Tehsildar or competent	Appli
3	Oil & Natural Gas Corporation Scholarship	Not Applicable	Highest CGPA in Mechanical and Chemical Engineering	IAII	Rs. 60,000/- pa for one year	Awrdees are to be nominated by DSW Office on the basis of CGPA till VI semester	Toppe third Mech Chem Strea
D- F	Private Company	<i>!</i> -					1
1	OPJEMS	Not Applicable	Top 20 rank holder students based on the rank in JEE for first year and top 20 students based on CGPA for secon, third year and final year students.	All	payment of Rs	1. First 3 toppers of 2nd, 3rd and 4th year of four stream. 2. Final selection is based on written test and interview	Applia award consi follov streal Engin Electi Engin 3.Me Engin

Rs. 25,000/- per

semester each

Vesuvius

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Scholarship

1-Three Female

candidate only 2-One All

candidate each from

Below Rs. 2.50

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1. Applications will be invited by DSW

a constitute committee as per MOU.

office MNIT. 2. Selection will be done by

			Chemical, Metallurgy and Mechanical 3- Minimum CGPA- 7.0		student from 3rd to 6th semester		will control the control the subject satisf
E. N	on-government	al organization	(NCO)				perfo
							1. Sel
11		Under category BPL	1. Students who have passed Class XII from a recognized board in India 2. 1st year under-graduate students.	IAII	Rs. 50,000/- per annum	Apply in prescribed format and get forwarded from office of Dean stduents welfare Section and send to FAEA	acade excel (Marl and III social econo backg Final are be entire discrete full coproposition of the Final coproposition of the Final coproposition of the full coproposition o
							1. Tot schol will b (one II, III a years
2	Memorial	income up to Rs.2.0 lakhs	CGPA score of at least 7.00 till qualifying examination	All	Rs. 24000 /- per annum for each batch. (1st, 2nd, 3rd and 4th year).	"1. Applications will be invited by DSW office MNIT in Nov/Dec every year. 2. The selection procedure (guiding principles) for grant of scholarships shall be evolved by MNITJ as Per the rules of MNITJ"	

weigl perfo extra cocur activi weigl Swami For Fresh student in Total family Five types of Complete prescribe application with Dayanand NIT minimum 65% The a ΑII income from all Scholarship supporting documents and duly Charitable marks obtain in 12th appli sources shoule Rs.15000 to Rs. certified and forwarded by HOD of the Educational Class and for renewal

	Foundation (Merit-cum- Mean Scholarship	be less than Rs. 6 lakhs p.a.	more than6.5 CGPA required.		50000 per annum.	institution shoule submitted within a time limit	maxii year
4	Samsung Star Schoalrship	Not Applicable	Should have passed 10th/12th from Jawahar Navodaya Vidhyalaya	All	Upto 2.0 lac per annum	Complete prescribe application with supporting documents and duly certified and forwarded by HOD of the institution shoule submitted within a time limit	The fi decis taken Fundi
5	Shraman Foundation Scholarship	< Rs. 2.5 lakhs p.a.	UG student enrolled into any NIT	All	Upto Rs. 50,000 p.a., Maximum support for Rs. 2,00,000 (upto 8 semester)		
F- <i>F</i>	Alumni Scholars	hip -	1	1	1		1
1	Raj and Sarla Bhargava Scholarship	Total family income upto Rs. 3.0 lakhs p.a.	Completed III year in Elecronics and Communication Engineering	All	Rs. 15000/- per annum	Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee.	Selectors based acade perfroupto (Only stude year)
2	Prof. S. K. Gupta Gold Medal	Not Applicable	Completed final year of degree program in Mechanical Engineering	All	Gold Medal and Citation	Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee.	Selectory be made the bacade perfro (80% weight perfore extra

	Gupta Gold Medal	Not Applicable	Mechanical Engineering	All	Citation		(80% weigh perfo extra cocur activi weigh
3		Below Rs. 1.00 lakh p.a.	Academic and BPL	All	Rs. 40,000/- per annum	Application will be invited by DSW office MNIT.2. Selection will be done by a constitute committee.	The fi decis taken Fundi
4	1988 Alumni Scholarship	Rs 4.50 lakh	Minimum CGPA should be 7.0, first year student the criteria shall be rank in JEE (mains) examination		Rs. 25,000/- per annum	Applications will be invited by DSW office MNIT. 2. Selection will be done by a constitute committee.	Minim should first ye the cri be ran (main exami

# **Scholarship & Awards**

# Scholarships/Awards to UG students

Undergraduate students can apply for the scholarship as per the information given in following table. Students are advised to read relevant information at web links and verify their eligibility before applying. Please follow the procedure as outlined.

State level scholarsgips for post merit students: Scholarship & Awards

# Scholarships/Awards to UG students

Undergraduate students can apply for the scholarship as per the information given in following table. Students are advised to read relevant information at web links and verify their eligibility before applying. Please follow the procedure as outlined.

#### **Placement**

#### Home

Welcome to Placement and Training cell of MNIT Jaipur. The Training & Placement cell is mainly responsible for

- 1. Facilitating Industrial Training, mandatory for UG (B.Tech.) curriculum.
- 2. Inviting Companies/Institutions/Organizations of repute for placements of both UG and PG students.

The T&P cell collaborates with leading organizations for setting up internship and training program of students. The Office interacts with many companies/industries in the country, of which nearly 200 companies visit the campus for holding campus interviews. These organizations which approach the institute come under the purview of: Core Engineering Industries, IT & IT enabled services, Manufacturing, Consultancy Firms, Investment & Finance Companies, Management Organisations, R & D laboratories.

Job offers, dates of interviews, selection of candidates etc. are announced through the Training & Placement Office.

The placement season runs through the course of the year commencing the first week of August through to March.

Institute Placement Policy

Institute Placement Policy

# Placement Procedure for Companies

- The company should fill in the Job Notification Form (JNF) and submit it to the Training and Placement Cell (TPC) as an e-mail attachment to placements@mnit.ac.in. The JNF serves as an introduction of the job profile for the benefit of the candidates and also informs them of the company's requirements.
- The company will be allotted slots and dates for conducting Pre-Placement Talk (PPT)/Written Test/Online Test, with a request to confirm the same by a specified date. On failing to do so, the allotted slot may be given to other companies on their request. Request for any change in the slot can be entertained subject to its availability.
- The company can ask for the resumes of interested students and has the liberty to shortlist them before the beginning of the placement process.

# Summer Internship and Placement

#	Description	
1	Summer Internship Programme 2022-23	
2	Placement Programme 2022-23	
3	Placement Report 2021-22	
4	Placement Report 2020-21	
5	Placement Report 2019-20	
6	Placement Report 2018-19	
7	Placement Report 2017-18	

# **Training**

### **Summer training**

Practical Training is an important part of any technical curriculum. Summer Training/Internship offers Students an Opportunity to work in a professional space, to acquaint themselves with the real world application of technologies they learn on the campus and to enhance their technical skills.

This exposure will help them to deliver their best when they join the industry as working

professionals.

Placement and Training Cell facilitates the practical training of students

Companies/Industries/Organizations of National and International repute. Some of the students

also get Research Internship offers from Germany, Canada, UK, Singapore, South Korea, Finland,

Australia, Japan etc. Students also take up research projects as summer interns at IITs, IISc, IIMs,

DRDO, ISRO, BHEL, NTPC.

Full Semester Industry Internship

Institute policy also permits students to spend one full semester (7th Semester of B.Tech./3rd

Semester of M.Tech.) in industry. This provision is optional for students having more than 8 CGPA.

Summer internship and Pre-Placement Offer (PPO)

While visiting campus for recruitment, organizations are encouraged to also consider pre-final year

students for Summer Internship that can be converted into Pre-Placement Offer.

**MNIT Placement Portal** 

MNIT Training & Placement Cell aims at building a strong interface between industry and the

University for training and placement of students. To make recruitment session smoother for

students, Training & Placement Cell has a web portal for handling the placement registration for

companies visiting our campus.

**Placement Contact Details** 

Training & Placement Cell

Malaviya National Institute of Technology Jaipur

JLN Marg, Jaipur- 302017

Rajasthan, India

Phone: +91-141-2529065

Email: placements@mnit.ac.in

### Prof. D. Boolchandani

# Professor In-charge, Training & Placement Cell

Ph: +91-141-2715018

Name of the Faculty Coordinator		
Dr. Meenakshi Tripathi	+91-9549654393	mtripathi.cse@mnit.ac.in
Dr. Priyanka Sihag	+91-9549650313	priyanka.dms@mnit.ac.in
Dr. Ila Sharma	+91-9549650769	ila.ece@mnit.ac.in
Dr. Sunanda Sinha	+91-9549650369	sunanda.cee@mnit.ac.in
Dr. Tapas Bajpai	+91-9549650603	tapas.mech@mnit.ac.in
Dr. Ravita Lamba	+91-9549650797	ravita.ee@mnit.ac.in

Email: pi.tnp@mnit.ac.in

# **Admission Procedure**

# **Admission Procedure in Undergraduate Programmes**

1. Admission to the B.Tech./B.Arch. Programmes at MNIT Jaipur

Candidates desiring to join for the B.Tech./ B. Arch. programmes at MNIT Jaipur may apply for admission following the procedure of JoSAA and CSAB 2023. The candidates may refer the Information Brochure for eligibility, seat allotment rules, counselling procedures and admission.

MNIT CSAB Helpline Phone No.: 0141-2715082, +91-9166167199 Email: csab2023help@mnit.ac.in

2. Admission for foreigners in UG/PG programme is done through DASA (Direct admission of students abroad) based on SAT Score, for details see the website: <a href="https://www.dasanit.org">https://www.dasanit.org</a>

#### **Admission Procedure in Post-Graduate Programmes**

1. Admission to the M.Tech./M.Plan. Programmes at MNIT Jaipur

Candidates desiring to join for the M.Tech./ M.Plan. programmes at MNIT Jaipur may apply for admission following the procedures given in the in the Centralized Counselling for Admissions (CCMT 2023) portal. The candidates may refer the Information Brochure for eligibility, seat allotment rules, counselling procedures and admission. Valid Gate Score: GATE score of years 2021, 2022 and 2023. The seat availability under the various categories for the various PG programmes is detailed in the seat matrix.

Admitted candidates will also be eligible for "Direct entry of M.Tech./M.Plan. students to Ph.D. program" after the 2nd semester as per the new scheme approved in the 50th MNIT Senate meeting which will be implemented after approval of the BoG.

MNIT Seat Matrix for M.Tech./ M.Plan. programmes

Information Brochure for CCMT 2023

Counselling Schedule for CCMT 2023

Link to the portal

MNIT CCMT Helpline Phone No.: 0141-2715082, +91-9166167199 Email: ccmt2023help@mnit.ac.in

# 2. Admission to the M.Sc. Programmes at MNIT Jaipur

How can one take admission in M.Sc. programme at MNIT Jaipur?

Candidates desiring to join for the M.Sc programmes in Department of Physics, Chemistry and Mathematics at MNIT Jaipur may apply for admission following the procedures given in the Centralized Counselling for Admissions (CCMN 2023) portal. The admission will be based on their Jam score of year 2023. The seat availability under the various categories for the various PG programmes is

	the various PG programmes is
1.	How can one take admission in Undergraduate Programmes (B.Tech, B.Arch) at MNIT Jaipur?
	One can take admission to the UG programmes (B.Tech, B.Arch,) at MNIT Jaipur only through Central Seat Allocation Board (CSAB (Main) examination of the same year. No other means of admission is available.
2.	How can one take admission in M.Tech/M.Plan programmes at MNIT Jaipur?
	One can take admission to M.Tech/M.Plan (Full Time/ Part Time) programmes in the institute through i) Centralized counseling by Institutional Selection Mechanism (under sponsored category based on the institute's notification issued in the month of April-M
3.	How can one take admission in Ph.D programme at MNIT Jaipur?
	One can take admission into Ph.D. programme through institutional selection mechanism based on the institute's notification isso (April-May and NovDec. each year)
4.	What is the minimum qualification for the admission in PG / Ph.D. program.
Ans.	The minimum eligibility criteria for the admission to PG / Ph.D. programs are available at link http://www.mnit.ac.in/academics/F

Ans. One can take admission to M.Sc. (Applied Chemistry, Applied Mathematics and Applied Physics) programmes through centralized M.Sc. admission (CCMN) on the basis of IIT JAM score.

# 6. How can one take admission in MBA programme at MNIT Jaipur?

Ans. Admission to MBA programme at MNIT Jaipur is done through an open advertisement and Institutional selection process. Advert during the month of January/February of a year. The minimum eligibility criteria for admission to the MBA program are available link <a href="http://www.mnit.ac.in/academics/PG.php">http://www.mnit.ac.in/academics/PG.php</a>

# 7. How can one pay fee at the time of admission?

Ans. The fee as mentioned in link applicable to new entrants can be paid by them in the form of Demand Draft favoring "Registrar MN "Jaipur" or through cash at the ICICI Bank based on the fee challan given at the time of admission/registration in the Institute.

# 8. After taking admission to a programme paying full fee if a student cancels his/her admission, how much money he/she will be

Ans. In case any student after taking admission in UG/PG/Ph.D. program withdraws, the fee refund shall be made as per the policies g For UG program:

http://www.mnit.ac.in/academics/downloads/fee\_refund\_policyUG.pdf

For MBA/M.Sc. program:

http://www.mnit.ac.in/academics/downloads/fee refund policy for MBA M.sc .pdf

PG program M.Tech/M.Plan program:

http://www.mnit.ac.in/academics/downloads/Fee refund policy for M.Tech M .Arch .pdf

detailed in the seat matrix.

MNIT CCMT Helpline Phone No.: 0141-2715082, +91-9166167199 Email: ccmn2023help@mnit.ac.in

- 3. MBA institute admission procedure advertisement is put up on the website in the month of February/March.
  - https://mnit.ac.in/dept dms/admission.php
- 4. M.Tech Part Time/ sponsored, advertisement is put up on the website in the month of April. <a href="http://online.mnit.ac.in/admission/pg">http://online.mnit.ac.in/admission/pg</a>
- 5. Ph.D. admission are carried out twice in a year once in June and in December, advertisement are put up on the website in the second half of April/May and second half of November. <a href="http://online.mnit.ac.in/admission/phd">http://online.mnit.ac.in/admission/phd</a>

#### **Other Admission Procedure**

- 1. ICCR- (Indian Council for Cultural Relations): (http://www.iccr.gov.in)
- 2. MEA- (Ministry of External Affairs): (http://www.mea.gov.in)

#### **Admission Related Queries**

4	CIVIL ENGINEERING	STRUCTURAL ENGINEERING	Ν
		TRANSPORTATION ENGINEERING	N
		WATER RESOURCES ENGINEERING	N
		COMPUTER SCIENCE &	N
5	COMPUTER SCIENCE AND ENGINEERING	INFORMATION SECURITY	'`
		TRANSPORTATION ENGINEERING  WATER RESOURCES ENGINEERING  COMPUTER SCIENCE & INFORMATION SECURITY  COMPUTER SCIENCE AND ENGINEERING  POWER ELECTRONICS AND DRIVES  POWER SYSTEMS  POWER SYSTEMS  POWER SYSTEMS MANAGEMENT  ELECTRONICS & COMMUNICATION ENGINEERING  EMBEDDED SYSTEMS  VLSI DESIGN  WIRELESS AND OPTICAL COMMUNICATION  DESIGN ENGINEERING  INDUSTRIAL ENGINEERING  PRODUCTION ENGINEERING  THERMAL ENGINEERING  ND MATERIALS ENGINEERING  METALLURGICAL & MATERIALS ENGINEERING	Ν
		POWER ELECTRONICS AND DRIVES	N
6	ELECTRICAL ENGINEERING	POWER SYSTEMS	٨
		POWER SYSTEMS MANAGEMENT	٨
		ELECTRONICS & COMMUNICATION ENGINEERING	٨
_		EMBEDDED SYSTEMS	٨
7	ELECTRONICS AND COMMUNICATION ENGINEERING	<u>VLSI DESIGN</u>	٨
		ELECTRONICS & COMMUNICATION ENGINEERING  EMBEDDED SYSTEMS  VLSI DESIGN	N
		DESIGN ENGINEERING	٨
_		INDUSTRIAL ENGINEERING	٨
8	MECHANICAL ENGINEERING	PRODUCTION ENGINEERING	٨
		THERMAL ENGINEERING	N
_		METALLURGICAL & MATERIALS ENGINEERING	N
9	METALLURGICAL AND MATERIALS ENGINEERING	STEEL TECHNOLOGY	N

**Specialization** 

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URBAN PLANNING

RENEWABLE ENERGY

CHEMICAL ENGINEERING

DISASTER ASSESSMENT AND MITIGATION

ENVIRONMENTAL ENGINEERING

EARTHQUAKE ENGINEERING

**BUSINESS ADMINISTRATION** 

APPLIED CHEMISTRY

APPLIED PHYSICS

APPLIED MATHEMATICS

MATERIALS SCIENCE & ENGINEERING

Academic Programmes

MATHEMATICS

MANAGEMENT

CHEMISTRY

PHYSICS

MATERIALS RESEARCH CENTRE

MANAGEMENT STUDIES

NATIONAL CENTRE FOR DISASTER MITIGATION AND

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Department

ARCHITECTURE AND PLANNING

CHEMICAL ENGINEERING

CENTRE FOR ENERGY AND ENVIRONMENT

# Academic Programme (UG)

The Institute offers following UG courses.

Department	
ARCHITECTURE AND PLANNING	B.Arch
CHEMICAL ENGINEERING	B.Tech
CIVIL ENGINEERING	B.Tech
COMPUTER SCIENCE AND ENGINEERING	B.Tech
ELECTRICAL ENGINEERING	B.Tech
ELECTRONICS AND COMMUNICATION ENGINEERING	B.Tech
MECHANICAL ENGINEERING	B.Tech
METALLURGICAL AND MATERIALS ENGINEERING	B.Tech

# **Academic Programme (PG)**

The Institute offers following M.Tech/M.Sc./M.Plan/ MBA courses.

#### **Campus Life**

#### **About Campus**

Extending into an area of over 312 acres of lush greenery, the campus of the Institute is imaginatively laid-out with a picturesque landscape. It presents a spectacle of harmony in modern architecture, and natural beauty which enthralls and inspires. Indeed, all the states and union territories of the country are represented in the undergraduate intake of the Institute (50% from Rajasthan & the other 50% from all States & Union Territories of India), thus making it a perfect example of the celebrated axiom, 'unity in diversity'. The institute is actively engaged in research, consultancy and development activities and collaborates with leading industrial houses and IT companies in various projects. The campus provides all essential amenities for community living like staff clubs, hospital, bank, post office, community centre, school, staff residences, gymnasium, playing fields, guest houses, and canteen etc.

#### Library

The Institute has a spacious and well equipped library which is being run according to an open access system. It has rich collection of about 1,33,600 volumes of books, periodicals, reports and reference material. In addition to the books from main library, some more books are issued to students from book bank also. There is a video viewing facility. Large number of books, periodicals, video cassettes and CD-ROMs are available. The library is being fully computerized.

#### Canteen

One canteen near the instructional zone, another near the hostels and one Nescafe coffee shop provides refreshments to the students and the staff during and beyond the working hours.

#### **Guest Houses**

There are two guest houses in the campus to cater the needs of guests and students.

#### **Sports**

Adequate facilities are available for sports and games and for co-curricular activities. The campus is well laid out with roads, electrical installations, water supply and underground drainage system etc.

#### **Banks**

There is a branch of the ICICI Bank Ltd. and SBI Bank in the campus. Other reputed banks such as SBI, OBC, and PNB etc. are within walking distance from the institute campus.

#### **Post-Office**

There is a Post Office in the campus of MNIT.

#### **Medical Facilities**

A full-fledged Dispensary is available in the campus. It is supervised by a residential Medical Officer. The services of a part-time Homeopathy Doctor and a Lady Doctor are also available to students and to the family members of the staff.

#### Ministry of Education (MoE) Flagship Programs

Education is crucial in rebalancing the country's socioeconomic fabric as India's citizens are its most valuable resource, our billion-strong nation requires nurturing and care in the form of basic education to improve its quality of life. The Department of Secondary Education and Literacy is focused on "universalization of education" and developing better citizens from our young people, whereas the Department of Higher Education is focused on providing world-class opportunities for higher education and research.

The Ministry's main goals would be to develop the National Policy on Education and ensure that it is implemented in letter and spirit. Provide financial assistance to deserving students from deprived sections of society in the form of scholarships, loan subsidies and so on. Encouraging international cooperation in education, including collaboration with UNESCO, foreign governments, and universities to improve educational opportunities in the country.

### People

Dr. Pooja Nigam

Coordinator (MoE Flagship Programs)

coordinator.moe.flagship@mnit.ac.in

Student Team

# Prerna Jain General Secretary

**Abhinav Jain** 

Joint Secretary(Design + Technical + Publicity)

Jaswant Singh

Joint Secretary(Finance + Logistic)

**Ashish Ambedkar** 

Joint Secretary(Literary + Media)

**Aakansha Sharma** 

Executive(Design + Technical + Publicity)

**Nishant Kumar** 

**Executive(Finance + Logistic)** 

**Purab Brahma** 

Executive(Literary + Media)

International Yoga Day

#### **IDY-2022**

- 1. <u>International Day of Yoga 2022 at MNIT Jaipur</u>
- 2. 8th International Yoga Day at MNIT Jaipur 21st June 2022, 6:30 AM Children Park MNIT jaipur

#### Student magazine:

Articles for Student Magazine are to be sent to Dr. Sangeeth Pillai, Coordinator, Student Magazine. coordinator.student.magazine@mnit.ac.in

**Student Achievements** 

...

**Poorvie Choudhary** 

Metallurgical & Material Science Engineering, 3rd year, 2020UMT1361

**Rajasthan Senior State Athletic Meet 2022** 

Gold Medal - 200m Sprint Race

# Library services:

# Library Membership

Students, Teachers, Research Scholars and Staff of the Institute are admitted as members of the library. Library membership forms (if required) can be obtained and submitted at the circulation counter in the library. The number of books that may be borrowed by each category of members and the period of loan is as under:

#### **Borrowing Privileges**

Category of Members	N
UG	4 (Stack Area)
PG	4 (Stack Area)
PhD	8
Academic	20
Officers	8
Non Teaching	8
Library Staff	8
Book Bank (UG and PG)	4

**Book Borrowing Rules** 

- 1. Books can be issued only against RFID-Card issued by the Institute to the borrowers. The RFID-Card is non-transferable and its loss should be immediately reported to the library.
- 2. Books issued will not be accepted back on the same day.
- 3. The Library member is responsible for any book issued against his/her RFID card, as per the library record.
- 4. No borrowing facility is available to the visitors. Visitor or guest member from academic or research institute is allowed to use the library for a short period of time on payment basis (for Reference only, not for sitting the whole day) with the prior permission from the Competent authority/Librarian. The Guest member is required to produce proof of identification. Library space cannot be accessed by outsiders as public library for preparing various competitive exams etc. For more details about outside membership. Click Here
- 5. The borrower should check the fitness of the document before getting it issued. Any discrepancy should be brought to the notice of the library staff at the Circulation Counter who will put necessary remarks on the document before issuing. The borrower will be held responsible for any defect/damage found at the time of return of the document, if not recorded on it earlier, and will be liable to pay the penalty as decided by the competent authority/Librarian.

- 6. The member would satisfy himself/herself before leaving the issue counter as to whether the book is in good condition or not otherwise he may be held responsible.
- 7. No book shall be issued to loan, which Librarian feels is not in a condition to be safely handled by the borrower.
- 8. Library members are advised not to issue Books to others on their names.
- 9. Books are issued for 21 days from Main Library and for one semester from Book Bank, failing which late fine is applicable as per library rules.
- 10. The library members should check the book thoroughly for missing pages, chapters, pictures etc., while borrowing the book.
- 11. A borrower is responsible for the safe custody and return of the documents borrowed from the Library. Sending reminders to defaulters is not obligatory on the part of the Library.
- 12. Any book issued may be recalled by the Library before the due date of return without assigning any reason and the borrower has to abide by the decision.
- 13. Books issued should not be brought to the library except for check-in or renewal.
- 14. All the library members who want to return the books issued on their names are advised to wait until the books are shown as cancelled against their names.
- 15. Library members (Students, Faculty and staff etc) going on long leave, deputation, study leave, or extraordinary leave will have to return all borrowed materials before leaving the Institute.

#### **Book Renewal Rules**

- 1. Members can renew the books borrowed by them if the same books are not claimed by any other user. Book can be renewed by bringing them to the Library Circulation Counter.
- 2. For library members, Books will be reissued/renewed two times only for period of 21 days if there are no claims.
- 3. Library members can get the book(s) reissued on or before the due date by intimating the Library. Overdue books will not be reissued.

# Reference Service

Reference service will be provided in person, by telephone, by e-mail directly from the library. It helps users to fulfill their information needs.

Please drop your request to library@mnit.ac.in

# Current Awareness Service

This service provides the current information about the acquisition/updates/contents of library like:

- New Subscribed E Resources.
- New Arrivals of Books in library
- List of Newspaper/ Magazine etc.

# Inter Library Loan Service

Inter Library Loan enables you to obtain book (s) and other reading materials which are not available in our library collection, from other libraries with which library has an agreement, for your academic use. Such books would be obtained on loan for a specific period. The loan period may be stipulated by the lending library. Documents received under the ILL services will have to be returned before the due date. This service is provided on demand.

# Document delivery Service

Document delivery service enables you to obtain a copy of journal article, conference paper, book chapter, or other documents that are not available in the library collection, from other libraries with which library has arrangements for your academic use.

Please send an email with full bibliographic / citation details of the items required on any of the following: Email: library@mnit.ac.in

# Library Orientation program

Central Library organizes Library Orientation program for the new entrants in the beginning of the academic year. The aim of this program is to make the new members more familiar with the library resources, services and rules so that they can avail library services up to a great extent. Library also offers different training program and workshops time to time.

# Ask A Librarian

Ask a Librarian is a collaborative virtual reference service, that connects students, faculty members, and researchers from institute library with real-time and research assistance through chat box of email. This service will be provided in person, chat box of e-mail directly to the librarian. It helps users to fulfill their information needs.

Please drop your request to librarian@mnit.ac.in

#### UG Courses of Study 2022-2023

The Academic Section headed by Dean Academic is primarily entrusted with the responsibility of implementation of the decisions taken on 'Academic Matters' by the Senate and the SUGB / SPGB of the institute.

The Major functions / KRA's of Academic Section include the following:

- Receive, processes and maintain all records relating to the Undergraduate and Post graduate programmes including Curricula, courses offered, Academic Calendar, unfair means etc and attend to the academic problems of the students.
- Registration / pre-registration /course registration (open elective) of existing students and registration of new students.
- Registration of students for supplementary exams and coordinating with the respective departments for its smooth conduct and work related to admission of DASA/ICCR students.
- Preparation & issuance of Grade Sheets / Degree Certificates / Migration Certificates / Provisional Degree
   Certificates / Bonified Certificate /medium of instruction certificate, Fee structure, Transcripts,
   Verification etc.
- Matter related to grant of Scholarships Post graduate programmes students and & prizes / medals etc to Undergraduate / Postgraduate students.
- Issue necessary memoranda / orders related to academic matters.
- •Act as a channel of communication between the students, instructors, Departments / centers / interdisciplinary programmes and SPGB / SUGB with confidentiality.
- •To deal with matter pertaining to conduct / organizing of various meetings, committees. such as Convocation, Senate, SUGB. SPGB etc. and its record maintenance.
- •To deal with the matter related to Preparation & maintenance of fee ledger, refund of caution money, payment of honorarium to the external examiners, make payment for remedial classes; deal with ICCR UG/PG Scholarship issues etc.
- To deal with the work related to Parliament questions, RTI, general correspondence, appointment of guest faculty, reply to query received from any agency, etc. and any other miscellaneous work of Academic nature.

# People

Administration

Prof. Jyotirmay Mathur
Dean of Academic Affairs
dean.acad@mnit.ac.in
+91-141-2715040, 2713397

Prof. Suja George Associate Dean, (MERITE) ad.merite@mnit.ac.in Dr. Satish Kumar -on Lien IIM Nagpur Associate Dean, Post Graduate (PG) adpg.acad@mnit.ac.in

Dr. Sumit Khandelwal Associate Dean, Under Graduate (UG) adug.acad@mnit.ac.in

Prof. Rajesh Kumar Coordinator, Rankings coordinator.rankings@mnit.ac.in

Dr. Rajeev Agrawal
Coordinator, Library
coordinator.library@mnit.ac.in

Dr. Satyanarayana Neeli Coordinator, PhD coordinator.phd@mnit.ac.in

Dr. Md Oayes Midda
Coordinator, Accreditation
coordinator.accred@mnit.ac.in

Dr. Ram Dayal
Coordinator, Time Table
coordinator.timetable@mnit.ac.in

Dr. Anup Malik
Coordinator, First Year
coordinator.firstyear@mnit.ac.in

Staff:

Dr. Suman Rathore Deputy Registrar M.A., Ph.D. dr.acad@mnit.ac.in

Mr. Birbal Singh Assistant Registrar ar.acad@mnit.ac.in

# Mr. Jaipal Singh Chouhan Technical Assistant (SG-II)

B.E.

jaipalsingh.ccc@mnit.ac.in

# Mr. Hari Gyan

#### **Senior Technical Assistant**

B.Tech. in Computer Science and Engg., M.Tech. in Computer Science and Engineering, Ph.D. pursuing **Expertise**: Software Development and Maintenance, ERP Administration hari.cse@mnit.ac.in

# Mr. Ravi Kumar Sharma Senior Superintendent M.Com., PGDCAA ravi.sharma@mnit.ac.in

# Mr. Rohan Mathur Senior Superintendent

B.Com, MBA (finance), Junior Associate of the Indian Institute of Bankers (JAIIB), Certified Asso. rohan.rnc@mnit.ac.in

# Mr. Anil Vanjani Superintendent M.Com. in Business Administration anil.acad@mnit.ac.in

Mr. Deepak Atolia Programmer MCA, M.Sc. Statistics phd.acad@mnit.ac.in

Mr. Sanjay Kumar Assistant (SG-II) MA in Hindi, MA in Public Adm. and B.Ed. sanjay.acad@mnit.ac.in

Mr. Rajesh Kumar Meerwal Senior Technician B. Tech. (CSE), Diploma (CSE) Expertise: Web Development rajeshmeerwal.ccc@mnit.ac.in Mr. Mritunjaya Mishra
Senior Assistant
M.A. Public Administration
mritunjaya.acad@mnit.ac.in

Mr. Yuvraj Singh Rathore Senior Assistant M.Com. pg.acad@mnit.ac.in

Mr. Jasbir Singh Junior Assistant

B.Com., Post Graduate Diploma in Computer Application, M.Com. phd.acad@mnit.ac.in

Mr. Narendra Singh Bhati
Office Attendant
Senior Higher Secondary
narendrasingh.acad@mnit.ac.in

Staff

Note: Please write your query mail to the respective email address only.

# Help Desk No.: 0141-271-5035

	Help Desk No.: 0141-271-5035		
Sr. No	o. Name	Work Related	Official Email ID
		For General Queries	
1	Rohan Mathur	Sr. Superintendent (Accounts)	accounts.acad@mnit.ac.in
2	Ravi Kumar Sharma	Sr. Superintendent	ravi.sharma@mnit.ac.in
	ERP		
1	Hari Gyan	ERP (Academic Module)	erp.acad@mnit.ac.in
		Any query related to Ph.D. Students Issu	ie
1	Deepak Atolia	Ph.D.	phd.acad@mnit.ac.in
2	Sanjay Kumar	Ph.D.	phd.acad@mnit.ac.in
3	Jasbir Singh, Junior Assistant	Ph.D.	phd.acad@mnit.ac.in
	Any query rel	ated to Postgraduate Students (M.Tech./M.Pla	an/MBA/M.Sc.) Issue
1	Yuvraj Singh Rathore	PG	pg.acad@mnit.ac.in
	Any Que	ery related to Undergraduate Students (B.Tech	./B.Arch.) Issue
1	A ail Wariani	UG (B.Tech.) Electrical Engg., Electronics & Communication Engg., Mechanical Engg., Metallurgical & Materials Engg.	ugtwo.acad@mnit.ac.in
2	—Anil Vanjani	UG (B.Tech.) Civil Engg., Chemical Engg., Computer Science & Engg.,	ugone.acad@mnit.ac.in

Information Technology,

B. Architecture

1.	initify Salput is anniated to which oniversity/body:
Ans.	MNIT Jaipur is an Institute of National Importance and is an Autonomous Body under the Ministry of Education (MoE)
2.	Whether MNIT Jaipur is empowered to award Under Graduate and Post Graduate degrees?
Ans.	Yes, as per NIT act 2007 clause 6(1) sub clause b, MNIT Jaipur is empowered to hold examination and award degrees academic distinctions or titles. The NIT Act 2007 is available at link:
	http://education.gov.in/sites/upload_files/mhrd/files/upload_document/NITact2007.pdf
3.	What are the different Programs offered by MNIT Jaipur?
Ans.	MNIT Jaipur offers Under Graduate (UG), Post Graduate (PG) and Ph.D. programs. as per details below:  » UG Programs: Presently, there are 08 B. Tech. programs namely Civil Engg., Computer Science & Engg., Chemical Er Engg., Electronic and Comm. Engg., Metallurgical & Materials. Engg and Mechanical Engg. of 4Years duration. B.Arch. duration  » PG Programs: Currently, there are 18 M.Tech/M.Plan (2years) in various disciplines/specializations, 3 M.Sc. (2years) (2years) program.
	» Ph.D. programs: Offered in all departments.
4.	What is the fee Structure for different Programs offered at MNIT Jaipur?
	Fee Structure (revised from time to time) for different programs offered by MNIT Jaipur is given at link » For UG see link <u>Click here</u> » For PG see link <u>Click here</u>
	Can a Under Graduate (B.Tech./B.Arch.) student change his/her branch after first year at MNIT Jaipur/ Is internal sli MNIT Jaipur?
Ans.	No, internal sliding/change in allotted branch is not permitted after admission in the First Year through CSAB.
6.	Whether there is a provision of lateral entry for Diploma Holders/B.Sc. Students in B.Tech./B.Arch. Programs in MNI
Ans.	No, there is no provision of lateral entry for Diploma Holders/B.Sc. students in B.Tech./ B.Arch. programs.
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	Whether there is a provision for admission under Management quota in MNIT?
Ans.	No, there is no provision for admission under Management quota of any kind in MNIT.
8.	Whether there is a provision for admission under NRI quota?
	No, there is no NRI quota at MNIT Jaipur, However, MNIT admits students under Direct Admission for Students Abroad through centralized counseling process.
9.	What are the different schemes under which a foreign student can take admission at MNIT Jaipur?

MNIT Jaipur is affiliated to which University/Body?

Ans. At MNIT Jaipur a foreign student can take admission under DASA, Indian Council For Cultural Relations (ICCR) and Mi Affairs (MEA) schemes.

FAQ:

#### Related to admission:

1. How can one take admission in Undergraduate Programmes (B.Tech, B.Arch) at MNIT Jaipur?

Ans. One can take admission to the UG programmes (B.Tech, B.Arch,) at MNIT Jaipur only through Central Seat Allocation Board (CSAB) after qualifying JEE (Main) examination of the same year. No other means of admission is available.

2. How can one take admission in M.Tech/M.Plan programmes at MNIT Jaipur?

Ans. One can take admission to M.Tech/M.Plan (Full Time/ Part Time) programmes in the institute through i) Centralized counseling by CCMT ii) Institutional Selection Mechanism (under sponsored category based on the institute's notification issued in the month of April-May every year).

3. How can one take admission in Ph.D programme at MNIT Jaipur?

Ans. One can take admission into Ph.D. programme through institutional selection mechanism based on the institute's notification issued twice in a year (April-May and Nov.-Dec. each year)

4. What is the minimum qualification for the admission in PG / Ph.D. program.

Ans. The minimum eligibility criteria for the admission to PG / Ph.D. programs are available at link http://www.mnit.ac.in/academics/PG.php

5. How can one take admission in M.Sc. programme at MNIT Jaipur?

Ans. One can take admission to M.Sc. (Applied Chemistry, Applied Mathematics and Applied Physics) programmes through centralized counseling for M.Sc. admission (CCMN) on the basis of IIT JAM score.

6. How can one take admission in MBA programme at MNIT Jaipur?

Ans. Admission to MBA programme at MNIT Jaipur is done through an open advertisement and Institutional selection process. Advertisement comes during the month of January/February of a year. The minimum eligibility criteria for admission to the MBA program are available at link http://www.mnit.ac.in/academics/PG.php

7. How can one pay fee at the time of admission?

Ans. The fee as mentioned in link applicable to new entrants can be paid by them in the form of Demand Draft favoring "Registrar MNIT Jaipur" payable at "Jaipur" or through cash at the ICICI Bank based on the fee challan given at the time of admission/registration in the Institute.

8. After taking admission to a programme paying full fee if a student cancels his/her admission, how much money he/she will be refunded?

Ans. In case any student after taking admission in UG/PG/Ph.D. program withdraws, the fee refund shall be made as per the policies given below:

»For UG program:

http://www.mnit.ac.in/academics/downloads/fee\_refund\_policyUG.pdf

»For MBA/M.Sc. program:

http://www.mnit.ac.in/academics/downloads/fee\_refund\_policy\_for\_MBA\_M.sc\_.pdf

»PG program M.Tech/M.Plan program:

http://www.mnit.ac.in/academics/downloads/Fee\_refund\_policy\_for\_M.Tech\_M\_.Arch\_.pdf

scholarship:

	SC/ST students are eligible for Post Metric Scholarship (PMS) of the respective State Governments/ Govt. of India if t norms set by the them. For this the students shall have to apply at appropriate time to their concerned State Governm (Besides above, there are few other scholarship schemes offered by PSUs etc. available at link: <a href="http://www.mnit.ac.in/prospective_student/scholarship.php">http://www.mnit.ac.in/prospective_student/scholarship.php</a> )
2.	How many scholarships a student can avail at a time?
Ans.	Only one. A student getting scholarship from one Govt. fund is not eligible for the 2nd scholarship.
3.	Whether all students who take admission in M.Tech./M.Plan programme with valid GATE score will get Institute Ass
	The students admitted to M.Tech./M.Plan programs (Full Time) through CCMT will get "Institute Assistantship" every i satisfying attendance and CGPA requirement of the Institute.
	Whether the students admitted in M.Tech./M.Plan./Ph.D. programs under the sponsored category are eligible for an scholarship/Institute Assistantship?
	No, the students admitted in M.Tech./M.Plan./Ph.D. programs under the sponsored category are not eligible for any ty scholarship/Institute Assistantship.
5.	Whether an SC/ST/OBC/EBC/Minority M.Tech/ M.Plan student getting Institute Assistantship can avail PMS scholar
	No, an SC/ST/OBC/EBC/Minority M.Tech/ M.Plan student getting GATE scholarship/Institute assistantship can not av scholarship.
6.	Under which condition a PhD student will get scholarship/fellowship?
	A PhD full time student admitted under the non sponsored category if recommended by the Department selection cor Institute Assistantship/financial assistance from project grant at the time of admission, shall be eligible for assistants guidelines stipulated by M.H.R.D./Institute from time to time.
7.	Whether a student needs to return the scholarship/fellowship if he/she discontinues the programme?
Ans.	If any M.Tech./M.Plan./Ph.D. students availing Institute assistantship withdraws from the enroll program in midway w completion, he/she needs to refund the scholarship/fellowship amount received till the date of withdrawal from the In
	What Scholarship is applicable to Non-NET students pursuing Ph.D. (Full Time, Non sponsored) in the department of Humanities & Social Science and Management Studies?
Ans.	The students are eligible for 50% of the "Institute Assistantship" applicable from time to time.
9.	Is M.Tech./M.Plan./Ph.D. (part Time) students eligible for scholarship?

Whether any scholarship is given to SC/ST/OBC/EBC/Minority students at MNIT Jaipur?

Ans.	No. M.Tech./M.Plan./Ph.D. (part Time) students are not eligible for scholarship/Institute assistantship.
10.	When the Institute Assistantship of a M.Tech./M.Plan. student is terminated?
	The Institute Assistantship of a M.Tech./M.Plan. student is terminated when he/she attains CGPA less than 6 but abo semester.
	Is it compulsory for every student to register in each semester even though he/she is not required to regis in that semester?
	Yes, All the students who are on the rolls of the institute are required to register in person for each semeste specified in the Academic Calendar to continue to be on the rolls of the institute.
2.	What is a procedure for a registration in a semester?
Ans.	announced by Academic Section).
	ii. Thereafter, student shall approach his/her Program Adviser for approval of chosen courses.
	iii. After, the approval of courses by Program Advisor, the student shall approach the academic section on s
	the proof of fee paid, ID proof for signing in person on the registration register for that semester. (The signatures shall be permitted only after due verification.)
	Is the student presence must at the time of registration?
Ans.	Yes, a student is required to register in person (i.e. affix his/her signature on the register list of Academic Semester.  (The registration of a semester gets completed only when the student personally signs on the registration semester).
4.	What can lead to cancellation of registration of a semester?
	Absence for a period of three or more weeks at a stretch during a semester shall result in automatic cancel registration of a student from all the courses in the semester, the student has registered in.
5.	What is the penalty applicable to a student to register within the stipulated time?
	Any student registering late will be required to pay a late fee as decided by the Senate from time to time. In will be permitted to register after last date of registration as per academic calendar.
6.	What fee is applicable if a student is not registering for any course in the semester/in semester withdrawa
	In case the student is not registering for any course of the semester he/she is required to pay "Institute Fee tuition fee).
	If a student deposits the semester fee but is not present at the time of registration, whether he/she is allo the semester?
Ans.	No, mere payment of fee does not imply completion of registration for a semester.
	If a student has not registered in a semester as per the stipulated process, whether he/she can study in th he/she has paid the fee.
Ans.	No, the registration in a stipulated process (indicated above) is must for a student to attend classes and ap

midterm/end term examination of a semester.

What will happen if a student fails to register in the stipulated time?

9.

Ans	The sole responsibility for registration rests with the student concerned. All students who are not on author continue to register in the following semester till they complete their program (Within the specified maximu program).
11.	When the Institute Assistantship of a Ph.D. student is terminated?
Ans.	A Ph.D. student as well as Institute Assistantship is terminated from the program when he/she attains CGPA less than
12.	Can a Ph.D. student admitted without Institute Assistantship/Scholarship get scholarship at later stage (after admis
۸ns.	No, the student shall continue in the program without Institute Assistantship/Scholarship
13.	Can a Ph.D. student admitted with financial assistance from project grant shift to Institute Assistantship at later stage
Ans.	No, the student shall continue in the program on the terms and conditions he/ she was granted admission.
4.	Is M.Tech./M.Plan./Ph.D. student eligible for scholarship for unauthorized period of leave?
	The Institute Assistantship is not granted for the period of unauthorized leave/semester withdrawal. However, Institut given for the period of maternity leave/authorized leave.
Click	here for Scholarships/Awards to UG students
	Registration:

### Documents/Certificates

The students/applicants desiring any of the following certificates are advised to carefully read the below mentioned instructions.

- 1. Bonafide Certificate,
- 2. Fee Structure,
- 3. Tuition fee certificate,
- 4. C & S Form for foreign students, (Dean International Affairs)
- 5. Original/duplicate Migration Certificate
- 6. Provisional Degree Certificate
- 7. Original/duplicate grade sheet.
- 8. Original/duplicate final degree certificate.
- 9. Medium of Instruction certificate
- 10. Transcripts

- 11. Verification of degree etc.
- 12. If any other document pertaining to Academic Section.
- 1. Existing students of MNIT are advised to apply for the required document/certificate through their ERP login.
- 2. Passed out students/applicants are advised to apply for the required certificate in the **prescribed format**.
- 3. For the convenience of students timings exclusively reserved for students in Academic Section are 12:00 to 01:00 PM and 04:00 PM to 06:00 PM to collect required documents. Hence, they are advised to contact/visit academic section / submit their application during the said time.
- 4. The students may kindly note that for preparing any of the required document(s) excluding transcripts & duplicate documents, in order to avoid delays caused in issuing of certificates the minimum time period required to be given to the academic section for processing the application can be 3 days. Hence, they may kindly apply for certificates in advance, in accordance with this.
- 5. In case a student/applicant is deputing some person for collection of the documents applied for, he/she is required to send "Letter of Authority" available at <a href="http://www.mnit.ac.in/academics/format.php">http://www.mnit.ac.in/academics/format.php</a> with the person authorized to collect the documents.
- 6. In case a student request for sending the document by post, the Academic Section, MNIT Jaipur, shall not be responsible for loss or damage of documents during transit.
- 7. Students may kindly note that no fee shall be charged for issue of Original grade sheet, medium of instruction certificate, Bonafide Certificate, Fee Structure, Tuition fee certificate, Migration Certificate and Provisional Degree Certificate. However, fee as per the details mentioned in <a href="http://www.mnit.ac.in/academics/Notice.php">http://www.mnit.ac.in/academics/Notice.php</a> shall be charged for issuance of *duplicate* grade sheets, duplicate degree, Verification of degree and Transcripts.
- 8. For issuance of Identity Card, Character Certificate and Railway Concession Form, the students are advised to approach the office of Dean, Students Welfare.
- 9. The detailed procedure/guideline regarding issuance of Transcripts, Duplicate documents, Verification Certificate and original certificates is as follows:

# **Notification regarding Fee**

- 1. Notification regarding revised transcripts fee
- 2. Notification regarding No Dues Certificate and Final Degree Certificate Fee
- 3. Revised Educational Verification Fee

**Anti-Ragging Campaign** 

Ragging is a crime!!!

In view of the directions of Hon'ble Supreme Court of India in the matter of "University of Kerala Vs Council, Principals, Colleges & Others" in SLP no. 24295/2006 dated 16.05.2007 and dated 08.05.2009 in Civil Appeal no. 887/2009 and in consideration of the determination of Govt. of India and University Grants Commission to prohibits, prevent and eliminate the scourge of ragging, UGC Regulations on curbing the menace of Ragging in Higher Educational Institutions in 2009 came to be issued and which were published in the Gazette of India on 04.07.2009. The said regulations are applicable on all the Institutions coming within the definition of University, Deemed University and all other Higher Educational Institutions, including MNIT Jaipur. Section 3 of said regulations provides that Ragging constitutes one or more of any of the following acts:

- 1. Any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student;
- 2. Indulging in rowdy or Undisciplined activities by any student or students which causes or is likely to cause annoyance, hardship, physical or psychological harm or to raise fear or apprehension thereof in any fresher or any other student;
- 3. Asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student;
- 4. Any act by a senior student that prevents, disrupts or disturbs the regular academic activity of any other student or a fresher;
- 5. Exploiting the services of a fresher or any other student for completing the academic tasks assigned to an individual or a group of students.
- 6. Any act of financial extortion or forceful expenditure burden put on a fresher or any other student by students;
- 7. Any act of physical abuse including all variants of it: sexual abuse, homosexual assaults, stripping, forcing obscene and lewd acts, gestures, causing bodily harm or any other danger to health or person;
- 8. Any act or abuse by spoken words, emails, post, public insults which would also include deriving perverted pleasure, vicarious or sadistic thrill from actively or passively participating in the discomfiture to fresher or any other student;
- 9. Any act that affects the mental health and self-confidence of a fresher or any other student

Ragging is totally prohibited in MNIT Jaipur and if any student is found indulged in activity of Ragging then severe action will taken including lodging of FIR against such student/students. At the time of registration, students and their parents have given an undertaking that he/she will not indulge in any kind of activity which amounts to ragging. Thus, it is requested that all the students of Institution will be watchful and help the administration in all possible ways to curb and to root out ragging in all its forms. For this purpose and in case of any emergency, please contact at the following numbers/officials:

**Security Control Room** 

Supervisor : 9549891442

Security In-charge

9549891441

Hostel Area: 9549891442

Faculty Incharge Security

Coordinator: 9549650367

On receipt of any information concerning any reported incident of ragging, the administration of MNIT shall immediately determine, if a case under the penal laws is made out and if so, a FIR shall be lodged with Police and local authorities under the appropriate penal provisions relating to one or more of the following namely:

- 1. Abetment to ragging;
- 2. Criminal conspiracy to rag;
- 3. Unlawful assembly and rioting while ragging;
- 4. Public nuisance created during ragging;
- 5. Violation of decency and morals through ragging;
- 6. Injury to body, causing hurt or grievous hurt;
- 7. Wrongful restraint;
- 8. Wrongful confinement;
- 9. Use of criminal force;
- 10. Assault, as well as sexual offences or unnatural offences;
- 11. Extortion, criminal trespass;
- 12. Offences against property;
- 13. Criminal intimidation;
- 14. Attempts to commit any or all of the mentioned offences against the victims(s);
- 15. Threat to commit any or all of the above mentioned offences against the victim (s);
- 16. Physical or psychological humiliation;
- 17. All other offences covered under the definition of "Ragging".

Further, other than lodging FIR the administration shall punish a student found guilty of ragging and shall take an appropriate decision in regard to punishment or otherwise depending on the nature and gravity of the guilt and one or more of the following punishments may be awarded:

- 1. Suspension from attending classes & academic privileges.
- 2. Withholding/withdrawing scholarships/fellowship and other benefits.
- 3. Debarring from appearing in any test/ examination or other evaluation process.
- 4. Withholding results.
- 5. Debarring from representing the Institute in any regional, national or international meet, tournament youth festival etc.
- 6. Suspension/ expulsion from the hostel.
- 7. Cancellation of admission.
- 8. Rustication from the Institution for period ranging from 1 to 4 semesters.
- 9. Expulsion from the Institutional and consequent debarring from admission to any other institution for a specific period.

10. Fine ranging between Rs. 25,000 to Rs. 1 Lakh. Right To Information

- 1. RTI Act
- 2. Suo motu disclosure Under Section 4 of the RTI Act 2005
- 3. Procedure for Obtaining Information under RTI
- 4. Application Form (Right to Information ACT, 2005)
- 5. Portal for RTI Online
- 6. RTI FAOs
- 7. Self appraisal report for year 2021-22
- 8. Self appraisal report for year 2020-21

Internal Complaints Committee for Prevention, Prohibition & Redressal of sexual harassment of women at workplace

The women's cell of MNIT Jaipur was established in August 2011, in accordance with the directives of Honorable Supreme Court of India to ensure safety, security and dignity of women at workplace.

Objective

Its objectives are:

To create a congenial working environment which is free of sexual harassment or gender based discrimination for all women employees and students. To heighten awareness and sensitivity to this important issue amongst all concerned.

Sexual Harassment Defined

According to Supreme Court Judgment on Sexual Harassment, on the case of Vishakha vs. the State of Rajasthan (August 1977), the behavior that can be considered as sexual harassment has been explicitly, legally defined as following- Sexual Harassment includes:

- 1. Physical contact and advances.
- 2. Demand or request for sexual favors.
- 3. Sexually coloured remarks.
- 4. Display of pornography.
- 5. Any other unwelcome physical, verbal or nonverbal conduct of a sexual nature.

The critical factor in sexual harassment is the unwelcomeness of the behavior. Thus, it is the impact of behavior on the recipient, rather than the intent of the perpetrator which is to be considered.

#### Dr. Preeti Bhatt,

Department of Humanities & Social Science
MNIT Jaipur

# Office memorandum Handbook on Sexual Harassment of Women at Workplace

#### Constitution of Women's Cell

#	Name	Constitution	E-Mail/ Mobile
1	Dr. Preeti Bhatt	A Coordinator who shall be a woman employed at senior level at workplace amongst the employees.	pbhatt.hum@mnit.ac.in 9549657352
"	Professor Kanupriya Sachdev	9 <u>rs</u> 9 d	ksachdev.phy@mnit.ac.i 9549657337
3	Dr. Rina Surana		rsurana.arch@mnit.ac.ir 9649960588
4	Dr. Dipti Saxena		dsaxena.ee@mnit.ac.in 9549654476
5	Dr. Kavita Lalwani	knowledge.	kavita.phy@mnit.ac.in 9549650180
6	Dr. Niraja Saraswat		niraja.hum@mnit.ac.in 9413129311
7	Dr. K. Palpandi		kpalpandi.maths@mnit. 9549650471
8	Professor Damyanti Gupta (Retd) Department of Political Science University of Rajasthan President, Rajasthan University Women's Association	One member from amongst non-government organizations or association committed to the cause of women or a person familiar with the issues relating to sexual harassment.	guptadamyanti@yahoo.o 9414064313

#### SC/ST/PWD/OBC Cell

SC/ST cell has been constituted in the institute as per the instructions of Government of India, Ministry of Personal, Public Grievances and Pension (Department of Personal and Training) vide office memorandum No. 43011/153/2010-Estt. (Res) dated 4th January, 2013.

#### **Functions of SC/ST Cell:**

- 1. Grievances redress for the grievances of SC/ST students and employees and render them necessary help in solving their academic as well as administrative problems.
- 2. Promotes higher Education among the SC/ST or weaker communities suffering from economics, social and educational deprivations.
- 3. Continuously monitors and evaluates the reservation policies and other programs intended for SC/STs by the Government of India for their effective implementation at Malaviya National Institute of Technology Jaipur.
- 4. Suggests the follow-up measures to the administration of the institute for achieving the objectives and targets laid down by Ministry of Human Resource Development for the empowerment of SC/STs.

#### **Submission of complaint:**

Any aggrieved employee/student belonging to the SC/ST category can reach out to the Committee by sending mail at <a href="mailto:coordinator.scstcell@mnit.ac.in">coordinator.scstcell@mnit.ac.in</a> or by filling google form: <a href="https://forms.gle/csfoa6Vow8fvFJsV6">https://forms.gle/csfoa6Vow8fvFJsV6</a>.

### Office Memorandum

Liaison Officer, SC/ST Cell

Dr. K. Palpandi

Assistant Professor Deptt. of Mathematics

Liaison Officer, OBC Cell

Dr. Subbaramaiah V.

**Assistant Professor** 

Deptt. of Chemical Engineering

#### Hostel:

**Hostel Details** 

# **Boys Hostels**

#	Name of the Hostel	
1	H1-PARIJAT	
2	H2-CHAITANYA	
3	H3-SATPURA	
4	H4-LOHIT	
5	H5-BRIHASPATI	
6	H6-KABIR	
7	H7-DRONA	
8	H8-VARUN	
9	H9-AUROBINDO	
10	H10-PG HOSTEL	
11	VINODINI	
	Total	

#	Name of the Hostel	Сарас
1	H1-MAITRI	206
2	H2-GARGI	402

#	Name of the Hostel	Сарас
3	ACHARYA BHAWAN (Residential Flats)	450
	Total	1058

#### **Girls Hostels**

#### News

- 1. Notice for hostel fee submission for Newly Admitted students of UG (Post CSAB Round) & PG (M.Tech/ M.Plan & M.Sc.)
- 2. Availability of hostel accommodation for All Boys and Girls of UG, PG, Ph.D. and Project Staff in MNIT Jaipur NEW
- 3. Notice for submission of hostel fee for 1st year UG students (newly admitted)
- 4. Hostel accommodation is not available for the MBA/ M.Sc 1st year male students for the Academic Year 2023-24
- 5. Notice for submission of hostel fee for odd semester (July 2023 to December 2023) for the New Hostelers
- 6. Notice for submission of hostel fee for odd semester (July 2023 to December 2023) for the Existing Hostelers
- 7. Circular regarding Random Hostel Allotment Policy.
- 8. Circular regarding availability of Hostel accommodation for all UG, PG & Ph.D students in Academic Year 2023-24
- 9. Circular regarding submission of hostel willingness for next semester (July-Dec. 2023)
- 10. Notice regarding submission of hostel fee for the 1st Year B. Tech/ B. Arch students (2022 batch only)
- 11. Notice for fee structure even semester 2022-23.
- 12. NIT for providing Mess services in the Gargi Hostel Due: Dec. 29, 2022
- 13. NIT for providing Mess services in the Vinodini Hostel Due: Dec. 29, 2022
- 14. NIT for providing Mess services in the Aurobindo Hostel Due: Dec. 29, 2022
- 15. All newly admitted M. Tech / M. Plan students are required to compulsory fill their City/District and State (as per domicile certificate) in ERP else they will not be considered for Hostel Allotment
- 16. All newly admitted PG/Ph.D students are required to report during 09.30 AM to 05.00 PM on respective reporting days
- 17. Notice for M.Tech/M.Plan students (2022-2023) only for Boys
- 18. Notice for M.Tech/M.Plan, M.Sc & MBA students (2022-2023) only for Girls
- 19. Revised Notice for M.Tech & M.Plan (2021 Batch II year Boys) №
- 20. Notice for UG & PG Students regarding hostel fee
- 21. Notice regarding Hostel Fee for UG & PG Students
- 22. Notice for B.Tech & B.Arch Students for Hostel Accommodation

- 23. Notice for PG Students for hostel accommodation
- 24. Hostel Accommodation for PG Students
- 25. Circular for Hostel Fee Structure for event semester i.e. Jan to June 2020
- 26. Notice regarding Hostel fee for odd Semester July-December 2019
- 27. Hostel Fee & Mess Advance for the Session 2019-2020
- 28. Notice regarding Hostel accommodation for PG Students 2019-2020
- 29. Helpline

	#	
	1	
	2	
#	Title of Order	Date of
1	Policy for change in grades once the grades are displayed	24-01-
2	Mid-term evaluation component for lab courses	24-01-
3	Revision in document retention policy	24-01-
4	GATE score mandatory for admission to Ph.D. program with scholarship support	24-01-
5	List of PG students terminated from Institute rolls	24-01-
6	List of Ph.D. students terminated from Institute rolls	24-01-
	Waiving off the written test for entrance in Ph.D. programmes of the institute for those who have cleared the UGC NET/CSIR/DST Inspire (with scholarship) or any other national examination offering scholarship.	24-01-
8	Guidelines for maintaining academic integrity	17-11-
9	Absolute Method for the award of grades to PG students, where the number of registered students are less than 30	14-10-
10	Consent letter format to be submitted by the PhD students for Full-Time to Part-	14-10-
11	Renaming of the course	14-10-
12	List of PhD students terminated from the Institute rolls	14-10-
13	Internship Guidelines for UG and PG students	24-08-
14	Renaming the PG programmes of Department of Computer Science and Engineering	21-04-
15	Office order regarding student registration for the 5th semester	17-02-
16	Office order regarding Revised Fee for Non Degree Students	19-03-
17	Office order regarding Formula for notional conversion of CGPA into percentage marks	29-02-
18	Office order regarding Registration for odd/even semester of UG/PG/Ph.D Programme	25-05-
19	Office order regarding Fee Refund policy for B. Tech. /B. Arch. students	15-05-
	Office order regarding midway withdrawal in UG/PG/Ph.D. programme without its successfully completion	11-05-
21	Office order regarding the Institute Assistanship	23-04-
22	Office order regarding those student who withdraw from the program in the Mid-way	23-04-
23	Office order regarding Amendment in PG Regulation	15-04-
24	Office order regarding Amendment in UG Regulation	15-04-
_	Office order regarding termination of Institute Assistantship due to not meeting CGPA [M. Tech/Ph.D.]	15-04-
26	Office order regarding guidelines for HRA	15-04-
27	Office order regarding NOC to Staff	15-04-
28	Office order regarding penalty for providing photocopy of Institute Fee Challan	15-04-
29	Office order regarding Revision of Institute Assistantship for PhD [Full Time]	15-04-

15-04

30 Office order regarding Revision of Institute Assistantship for [M. Tech/ M. Plan (Full Time)]

	#		
31	Guidelines applicable to students who come MNIT Jaipur for some project/research work	24-02-	
32	Minimum duration for completing the M. Tech/ M. Plan program	24-02-	
33	Modification in Clause 9.1 of PG regulation [july'12] regarding Appointment of Thesis supervisor		
34	Office order regarding vacation leave applicable to PG/Ph.D. students	24-02-	
	3		
	4		
	5		
	6		

# Office Orders

# **UG Regulations**

#	Title	
1	UG Courses of Study 2022-2023	
2	Internship Guidelines for UG and PG students	
3	Tenure of Chairman SPGB & SUGB	
4	UG Scheme & Course of Study	
5	Amendment in UG Rules & Regulations	
6	Guidelines for unfair means	
7	Semester promotion policy (1st and IInd Sem.)	
8	Semester promotion policy (3rd Sem and higher)	
9	Modification suggested in UG & M.Sc. Ordinances in order to consider the credit for the course/dissertation work done by the MNIT students in other Institution(s) with which MNIT has signed MOU for research and academic collaboration.	
10	UG Regulations	
11	Amendments in UG Regulations	
12	Matter regarding promotion of existing B.Tech / B.Arch students to the next semester (Academic session 2014-15)	

# PG Regulations

#	Title	
1	PG Regulations	
	Modification suggested in UG & M.Sc. Ordinances in order to consider the credit for the	
	course/dissertation work done by the MNIT students in other Institution(s) with which MNIT has signed	
	MOU for research and academic collaboration	
3	Absolute Method for the award of grades to PG students, where the number of registered students are less	
3	than 30	
4	Consent letter format to be submitted by the PhD students for Full-Time to Part-Time conversion	
5	Renaming of the course BMT 660	
6	Internship Guidelines for UG and PG students	
7	CGPA requirement for semester promotion and award of degree in PG programmes	
8	Revision of CGPA req from 9 to 8 for direct admission to PhD for BTechB.Arch qualified students	
9	Guidelines for constituting the thesis evaluationboard by PhD Supervisor	
10	Guidelines for addition of Joint-supervisor both externalinernal in PhD programme	
11	Tenure of Chairman SPGB & SUGB	
12	Amendments in PG Regulations	
13	Amendment in PG Registration	

#	Title	
14	Minimum CGPA required for award of PG Degree	
EEE Student Branch		

Welcome to the home page of the IEEE Student Branch of MNIT Jaipur. The Institution of Electrical & Electronics Engineers (IEEE) Student Branch of our institute is a thoroughly technical and professional student organization with a humanitarian outlook.

Global and Regional Affiliation Information:

Affiliated to: IEEE Rajasthan Subsection under the IEEE Delhi Section

Branch Code: STB31461

Branch Name under IEEE global database: Malaviya Natnl Inst of Tech

# Organizational Structure

### **Executive Committee**

Designation	Name	Departmental D
Faculty Advisor	Dr. VINAY PRATAP SINGH	Assistant Professor, Department of Electrica
Chair	Mr. VEERPRATAP MEENA	Ph.D. Scholar, Department of Electrical Eng
Vice-Chair	Mr. CHANDRA PRAKASH BARALA	Ph.D. Scholar, Department of Electrical Eng
Treasurer	Mr. TARUN KUMAR BASHISHTHA	Ph.D. Scholar, Department of Electrical Eng
Secretary	Ms. RASHI CHAUDHARY	Ph.D. Scholar, Department of Electronics &
Webmaster	Ms. YASHVI MUDGAL	Ph.D. Scholar, Department of Electrical Eng

# Other IEEE Societies and Faculty Advisor

Society Name/Affinity Group/Chapter	Faculty Advisor	Department
Photonic Society	Prof. Vijay Janyani	Department of Electronics & Communication
Signal Processing	Dr. Amit Joshi	Department of Electronics & Communication
Women in Engineering Affinity Group	Dr. Namita Mittal	Department of Computer Science & Engine
Sensor Council	Prof. Ghanshyam Singh	Department of Electronics & Communication
RFID Council	Prof. M. M. Sharma	Department of Electronics & Communication
APS Chapter	Dr. Sarthak Singhal	Department of Electronics & Communication
The Communications Society	Prof. Vijay Janyani	Department of Electronics & Communication
Industry Applications Society	Prof. Rajesh Kumar	Department of Electrical Engineering
Nanotechnology Council	Dr. Chitrakant Sahu	Department of Electronics & Communication
Power and Energy Society	Dr. Satish Sharma	Department of Electrical Engineering

Society Name/Affinity Group/Chapter	Faculty Advisor	Department
The Systems, Man, and Cybernetics Society	Dr. Vinay Pratap Singh	Department of Electrical Engineering
Computational Intelligence Society	Dr. Satyasai Jagannath Nanda	Department of Electronics & Communicatio
Activities	I	
Show entries		Search:
	Title	ocaron.
Current-fed Technologies for High Vo	oltage Gain and Low Voltage High (	Current Applications
Expert Lecture by Dr. Shilpi Gupta fro	om Electrical Engineering departme	nt, IIT Kanpur
Expert Talk by Dr. Hiroki Takesue		
Expert Talk on "Fast Frequency Contr Faculty of Electrical Engineering and	•	ek Prakash, Postdoctoral research fellow i greb, Croatia
IEEE Day 2020		
IEEE Day Celebrations 2018		
IEEE Rajasthan Subsection Day 2019		
International Conference on Optical ar	nd Wireless Technologies-2020	
International Yoga Day 2020		
Invited expert talk on Opportunities in	plug-in charging of Electric Vehicl	es

Academics

Department:

Welcome to Department of Architecture and Planning

Department Login Faculty Login

Department by the Numbers

116
Journal Publications
125
Conf. Publications
20
Research Projects
16
PhD Awarded
About the Department
Welcome to the Department of Architecture and Planning at Malaviya National Institute of Technology, Jaipur. Architecture is both the process and product of planning, designing and construction. Architectural works, in the material form of buildings, are often perceived as cultural symbols and as works of art. Historical civilizations are often identified with their surviving architectural achievements. Architecture is a medium of cultural expression displayed using a specific set of principles. These principals are meant to be interpreted so that the culture of a period or a nation can be fully expressed and understood.

### Vision

Faculty

To retain and promote the department as a regional centre of excellence, and a trend setter in addressing emerging challenges in the profession and research.

#### Mission

- 1. Holistic planning and design of premises commensurate with the emerging functional requirements.
- 2. Review of academic practices for enhanced focus on employability and better career prospects.
- 3. Augmentation and alignment of course content with respect to emerging professional requirements.

**Contact Information** 

# Dr. Satish Pipralia

Head, Department of Architecture & Planning

Malaviya National Institute of Technology JLN Marg, Jaipur-302017 0141-2713330

hod.arch@mnit.ac.in

## People

- Faculty
- Staff
- Research Scholars
- · PhD Awarded

#### **Faculty**

#### **Head of Department**

# Dr. Satish Pipralia

### **Associate Professor**

Ph.D.(Urban Planning), M.Plan. (Urban and Rural Planning), B.Arch. (Architecture)

**Research Interests**: Urban Financial Management, Urban Sustainability, Urban Issues & Informal Sector, Urban Development Planning and Management, Urban Dynamics.

spipralia.arch@mnit.ac.in View Detailed Profile Google Scholar Profile

#### **Professor**

#### Prof. Alok Ranjan

#### **Professor**

DSc.(HONY CAUSA), M. Plan. (MURP (HON)), B. Arch. (ARCHITECTURE)

**Research Interests**: Building Construction and management, Building materials, Building Technology, Sustainable Urban Development, Smart Buildings, Project Management and Scheduling, Land Management, Greenbuildings, HRM.

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<u>View Detailed Profile</u> Google Scholar Profile

#### **Prof. RAJEEV SHRINGI**

#### **Professor**

M.Plan.(URBAN PLANNING), B.Arch.(ARCHITECTURE)

**Research Interests**: Building Construction and management, Building regulations and controls, Building Science, Architecture and Design Education, Urban Planning, Urban Transformation, Urban water systems conservation.

rajeev.shringi@gmail.com 01412713321

<u>View Detailed Profile</u> Google Scholar Profile

#### **Prof. Tarush Chandra**

#### **Professor**

Ph.D.(Urban Planning), M.Plan. (Urban & Regional Planning), B.Arch. (Architecture)

Research Interests: Sustainable Urban Development, Sustainable construction: materials, technology, and management, Urban Sustainability, Urban Transformation, Urban Infrastructure Planning and Management, Integrating Passive Techniques in Buildings in Hot-Dry Climate, Policy Planning and Strategies for Built and Unbuilt Areas in Urban Domain, C&D Waste, Construction and Demolition (C&D) waste management and recycling, Energy efficiency in buildings, Energy Planning and Management, Solid Waste Management, Urban Development Planning and Management, Water efficiency in buildings.

tarushc@mnit.ac.in 01412713316

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Google Scholar Profile

#### **Associate Professor**

#### Ms. Kalpana Pandit

**Associate Professor** 

Ph.D.(Pursuing), M.Plan. (Urban Planning), B.Arch. (Architecture)

Research Interests: Sustainable Urban Development.

kpandit.arch@mnit.ac.in 01412523391

View Detailed Profile

Google Scholar Profile

# Ms. Meenu Varshney

#### **Associate Professor**

Ph.D.(Architecture and Plng(Pursuing), M.Plan.(Town Planning (AITP)), B.Arch.(Architecture)

**Research Interests**: Construction materials and methods, Green Buildings, Sustainable Urban Development, Urban Sustainability, Use of waste in construction sector, Solid Waste Management, Earthquake resistant Buildings and Construction Practices.

mvarshnay.arch@mnit.ac.in 01410

View Detailed Profile

Google Scholar Profile

#### **Dr. Nand Kumar**

#### **Associate Professor**

Ph.D.(Architecture and Planning), M.Plan. (M.U.R.P), B.Arch. (Architecture)

**Research Interests**: Urban Sustainability, Urban Development Planning and Management, Sustainable Urban Development, Sustainable development, Environmentally Sustainable Buildings, Energy efficiency in buildings, Energy Planning and Management, Building Envelope and Fenestration Design, Net zero built environment.

nkumar.arch@mnit.ac.in 014159074

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Google Scholar Profile

#### Ar. Ram Niwas Sharma

#### **Associate Professor**

M.Plan.(Urban Planning ),B.Arch.(Architecture )

**Research Interests**: Building Construction and management, Building Technology, Energy efficiency in buildings, Green Buildings, Regional Development, Sustainable Urban Development.

archi\_rns@yahoo.co.in 01412713391

View Detailed Profile

Google Scholar Profile

#### Dr. Rina Surana

#### **Associate Professor**

Ph.D.(Environmental Planning), M.Arch. (Urban Design), B.Arch. (Architecture)

**Research Interests**: Environmental Planning, Urban Design, Urban Planning, Architecture, Urban Water Systems and Integrated Urban Water Management, Natural Resource Vulnerability Analysis, Land Suitability Analysis, Environmental Impact Assessment.

rsurana.arch@mnit.ac.in 01412972114

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Google Scholar Profile

#### **Assistant Professor**

#### Dr. Ashwani Kumar

#### **Assistant Professor**

Ph.D.(Architecture & Planning), M.Arch.(Architecture), B.Arch.(Architecture)

**Research Interests**: Energy efficiency in buildings, Vernacular Architecture, Hill Architecture, Sustainable Urban Development, Building regulations and controls, Green Buildings, Disaster resistant buildings.

akumar.arch@mnit.ac.in 01419658116

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Google Scholar Profile ResearchGate Profile BibBase Profile Biosketch

#### Dr. Bhavna Shrivastava

#### **Assistant Professor**

Ph.D.(Architecture and Planning), M.Plan. (Urban Development and Planning), B.Arch. (Architecture) **Research Interests:** Building Construction and management, Building Technology, Urban Planning, Sustainable Built Environment.

bhavna.arch@mnit.ac.in
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# Dr. Gireendra Kumar

#### **Assistant Professor**

Ph.D.(Architecture & Planning), B.Arch.(Architecture)

**Research Interests**: Building Science, Sustainable Built Environment, Thermal and Visual Comfort Evaluation in Buildings, Building Envelope and Fenestration Design, Computer Application and Building Design Simulation, Urban Design, Architecture Visual Appreciation.

gireendra.arch@mnit.ac.in

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#### Ar. Himanshu Yoqi

#### **Assistant Professor**

M.Arch.(Industrial Design), B.Arch.(Architecture)

**Research Interests**: Additive Manufacturing, Advanced Manufacturing Technologies, Brand Management, Building Envelope and Fenestration Design, Building materials, Internet of Things, Material resuse and recycling, New Product Development, Green Buildings, Branding and Packaging, Industrial Design.

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#### Dr. Niruti Gupta

#### **Assistant Professor**

Ph.D.(Urban Planning), M.Plan. (Housing), B.Arch. (Architecture)

**Research Interests:** Sustainable Urban Development, Regional Development, Land Administration, Theories of Development, Urban Issues & Informal Sector, Public Policy.

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#### Mr. Nischal Jain

#### **Assistant Professor**

M.Arch.(Industrial Design), B.Arch.(Architecture)

Research Interests:.

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### Dr. Pooja Nigam

#### **Assistant Professor**

Ph.D.(Urban Planning), M.Plan.(Urban & Rural Planning), B.Arch.(Architecture)

**Research Interests**: Urban Land Management, Urban Land Policy and Planning, Sustainable Urban Development, Rural Planning, Urban Economics, Traditional and Vernacular Architecture, Indigenous Crafts and Traditional Knowledge Systems.

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#### Mr. Sangeeth S Pillai

#### **Assistant Professor**

Ph.D.(Architecture\*\*), M.Arch.(Architecture), B.Arch.

Research Interests: Architecture and Design Education, Instruction Design, Design Sketching, Design Thinking, Digital Fabrication Techniques & Technology/Tool Development, Fabrication and Manufacturing Product Design-R&D, Graphic Design, Industrial Design, Internet of Things in Buildings and Cities, Smart Buildings, Evidence Based Design, Digital Painting and Sculpting, Behavioural Science and Neuroscience in Architecture and Aesthetics, Spatial Cognition, Placemaking, Indigenous Crafts and Technology, Traditional and Vernacular Architecture.

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#### Mr. Saurabh Kishore Ojha

#### **Assistant Professor**

Ph.D.(Architecture), M.Arch. (Sustainable Architecture), B.Arch. (Architecture)

**Research Interests**: Building Science, Design Learning and Design Sketching, Energy efficiency in buildings, Solar passive designs, Sustainable Built Environment, Urban design, environment, Thermal and Visual Comfort Evaluation in Buildings, Sustainable/Eco-friendly materials, technology and practices.

saurabh.arch@mnit.ac.in

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#### Mrs. Sunita M Doddamani

#### **Assistant Professor**

M.Arch.(Advanced Design), B.Arch.

**Research Interests:** Sustaianble construction: material, methods and management, Sustainable development.

sunita.arch@mnit.ac.in
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# Mr. Yash Kumar Mittal Assistant Professor

Ph.D.(Building Engineering & Mgmt.), M.Plan., B.Arch.

**Research Interests**: Urban Planning, Urban Infrastructure Planning and Management, Sustaianble construction: material, methods and management, Risk Management, Project Management, ICT application in Construction, Building Construction and management, Building Information Modeling, Traffic Engineering and Transportation Planning.

yash.arch@mnit.ac.in View Detailed Profile Google Scholar Profile

Research scholars:

Ms. Anjali Saraswat

**2921rar9007** M.Plan, B.Arch

Research Interests: Urban Ecosystem

Supervisors: Dr Satish Pipralia, Dr. Ashwani Kumar

2021rar9007@mnit.ac.in

Ms. Shipra Goswami

**2021rar9006** M.Plan, B. Arch

**Research Interests**: Urban Fire, Urban Conservation **Supervisors**: Dr. Ashwani Kumar, Dr. Satish Pipralia

2021rar9006@mnit.ac.in

Ms. AKANKSHA MODI

2019RAR9551 M.Plan. B.Arch

Research Interests: Construction & Demolition waste Management, Sustainable Architecture, Vernacular

Planning

Supervisors: Dr. Yash Kumar Mittal

2019rar9551@mnit.ec.in

Mr. Hardik Saxena

#### 2019rar9524

: BTech Civil Engineering, MTech Construction Management, MTech Structural Engineering Research Interests: Project Management, Project Finance, Sustainable development, Materials Supervisors: Dr. Yash Kumar Mittal Co-supervisor: Dr. Niruti Gupta

2019rar9524@mnit.ac.in

Ms. Sonia Maheshwari

#### 2019RAR9100

B.Arch., M.Arch.(Urban Design)

Research Interests: Historic Urban Environments, Urban Heritage Management, Urban Space Studies, and

Integrated Development Approaches

**Supervisors :**Dr. Rina Surana 2019rar9100@mnit.ac.in

Ms. Sushmi Nimje

#### 2019RAR9032

B.E (Civil), M.Plan (Environmental planning and management)

**Research Interests**: Environmental planning, urban planning, tourism planning, integrated water resource management, urban water systems

**Supervisors**: Dr. Niruti Gupta/Dr. Yash kumar Mittal

2019rar9032@mnit.ac.in

Ms. Garima

#### 2019rar9014

B.Arch, M.Plan (Environment Planning & Management)

Research Interests: Sustainable Urban Environment, Natural Resource Conservation & Management,

Wetland Conservation, Environmental Impact Assessment, Environmental Monitoring.

Supervisors: Prof. Tarush Chandra

2019rar9014@mnit.ac.in

Ms. Akanksha Sangwan

#### 2019RAR9011

Bachelor in Architecture, Masters in Urban and Rural Planning

Research Interests: Urban & Regional Planning, Transport Planning, Rural Development, Green space,

Architecture

**Supervisors:** Dr. Nand Kumar, Dr. Ashwani Kumar

2019RAR9011@mnit.ac.in

Ms. Parul Bhyan

#### 2019RAR9010

M.Tech. (Construction & Real Estate Management), Bachelor of Architecture

Research Interests: Sustainable Urban Development, Green Building Rating System, Green Space,

Architecture

Supervisors: Dr. Bhavna Shrivastva, Dr. Nand Kumar

2019RAR9010@mnit.ac.in

Ms. Chinnu S Kumar

2019RAR9008

Masters in Urban Design

Research Interests: Tourism, Heritage, Urban Design, Place-making

**Supervisors**: Dr. Pooja Nigam 2019RAR9008@mnit.ac.in

Ms. JYOTI YADAV

#### 2018RAR9097

M. Arch (Landscape) B. Arch

Research Interests: Quality of Life, Urban Social Sustainability, Urban Open Space Planning, Urban

Landscape Environment, Historic Urban Landscape

**Supervisors :**Dr. Niruti Gupta 2018Trar9097@mnit.ac.in

Ms. Somya Mahlawat

#### 2018RAR9092

Bachelor in Architecture, Masters in Architecture (Architectural conservation)

**Research Interests**: Architecture, Sustainable Development, Energy efficiency, Thermal Comfort, Heritage and Conservation

Supervisors: Dr. Nand Kumar, Dr. Satish Pipralia

2018RAR9092@mnit.ac.in

Mr. Raunak Prasad

2018RAR9050

M.Plan(Urban Planning)

Research Interests: Housing Supervisors: Dr. Rina Surana 2018rar9052@mnit.ac.in

Mr. Abdur Raoof Khan

#### 2017RAR9043

I. B.Arch. (Bachelor in Architecture) II. M.C.P. (Masters in City Planning) III. PGPPM (Post Graduate Program in Project Management)

Research Interests: Urban & Regional Planning, Urban Design, Energy Planning, Transport Planning,

Architecture

Supervisors: Dr. Nand Kumar / Prof. (Dr.) Tarush Chandra

2017RAR9043@mnit.ac.in

**Facilities** 

# Climatology lab

Department has developed a Climatology lab as climatic information of the place is an important parameter to design a space in buildings and analyzing the climate parameters for better design options. This lab plays an important role in teaching climatology effectively to the students and support students of UG and PG to explore detail information using various instruments for project or design works. The lab is equipped with the latest instruments and data loggers for assessing the thermal comfort, air quality and lighting of a space in building. The instruments like Hydrothermal meter, Lux Meter, CO2 meter, PH meter, Infrared thermometer, Globe meter etc. are available to measure temperature, humidity, air speed, air quality and light illumination etc.

# **Carpentry lab**

This Lab provides hand on tools for academic and research works for students to conduct hand on exercise for exploring 3D visualization of the building or product structure using various materials like Wood, Acrylic sheet, Glass, Ivory etc. Various tools are used for model making and other works of carpentry to build the prototype structure of building and their component like staircase, façade, furniture etc. The lab is equipped with the latest tools like Claw Hammer, Handsaw, Tenon saw, Iron Jack Planner, Wooden Marking Gauge etc. for conducting different exercise by students under supervision of the technical staff of lab.

# **Computer lab**

The department is supported with two computer labs facility for student of architecture i.e. one is in departmental Computer lab with 40 workstations which is located in the department complex and another is in Computer Center at Prabha Bhawan which is equipped with 510 high end PCs including 120 graphics work stations placed in ten fully air conditioned computer laboratories with all modern teaching aids. The students are allowed to use these labs for 24 x 7 for their academic works and activities. The computer in the labs are equipped with latest architectural Software like Autodesk Revit, Auto-CAD, 3Ds Max, Adobe Photoshop, Google Sketch-up, Autodesk MEP, Revit MEP, Illustrator, Indesign Acrobat Flash, Adobe Suite etc.

# Library

The department is facilitating students with two libraries in the institute. The first one is the main institute library, well equipped library with open access system. It has rich collection of about 1,33,600 volumes of books, periodicals, reports and reference material. In addition to the books from main library, some more books are issued to students from book bank also. The library is being fully computerized. The second one is in the architecture department, which provides some historical and current information and resources like relevant architecture books, journals, periodicals. The library is strongest in classical studies, ancient history and updated with contemporary books.

#### **Documentation lab**

Documentation Lab of the Department is responsible for promoting information exchange mechanisms by reporting and disseminating the outcomes by students. It has a large collection of work done in NASA, Studio works, Annual Report, Seminar, Convocation Booklets, and Newsletters etc.

#### **Material Museum**

Material Museum displays the new materials from the construction and architecture sector, such as self-cleaning tiles, hemp insulation. Many of the construction materials used are focused on emerging technology or on nature itself, such as rice husk used for insulation purposes.

# 3D Printing

It is the construction of a three-dimensional object from a CAD model or a digital 3D model. Department of Architecture equipped with an FDM based 3D printer which allow the students to print their imagination into a physical Model with the FDM technology in ABS, PLA and a variety of materials.

#### **Laser Cutter**

Laser Cutters are ideally suited for cutting to size and different materials could be used in model making and developing architectural building components models. The outstanding features of laser cutting are a high level of precision and flexibility. The department is equipped with one laser cutter which enables the students to cut various parts of models very precisely.

- Journal Publications
- Conference Publications
- Book/Chapter Publications

# **Journal Publications (116)**

# 2023

Akanksha Sangwan, Nand Kumar, Ashwani Kumar, "**Amorphous Nature of Green Spaces in Indian Urban Planning**", International Review for Spatial Planning and Sustainable Development Volume: 11 / 208-225 / 2023

Manish Sharma, Bansari Sharma, Nand Kumar, Ashwani Kumar, "Establishing conceptual components for urban resilience: Taking clues from urbanization through a planner s lens", Natural Hazards Review Volume: 24 / / 2023

Parul Bhyan,Bhavna Shrivastava, Nand Kumar, "�Allocating weightage to sustainability criteria�s for performance assessment of group housing developments: Using fuzzy analytic hierarchy process�", Journal of Building Engineering, Volume:65 / / 2023 ISBN: ISSN 2352-7102

# 2022

Manish Sharma, Bansari Sharma, Nand Kumar, Ashwani Kumar, "A comparative study through a framework for developing countries", Urban Water Journal Volume: 1 / / 2022

Sunita Doddamani, Bhavna Shrivastava, Nand Kumar, "A Comprehensive Review on Noise Reducing Materials for Habitable Spaces", Applied Science and Engineering Progress Volume: 15 / / 2022

Sharma B., Sharma S., Kumar A., Kumar N., Pipralia , "Analysis of Urban Development Plan Formulation in India with Special Reference to Public Participation" , International Review for Spatial Planning and Sustainable Development Volume :10 / 192-210 / 2022

### **Projects**

- Saar
- Research Projects
- Testing & Consultancy Projects

@saar\_compendium

Smart cities and Academia towards Action and Research

Part A: Urban Management

# Part B: Climate Change and Resilient Cities

## Part C: Urban Infrastructure

# **Event Organized**

National FDP on ATAL Sponsored (in hybrid mode) Faculty Development Program on "Universal Design Approach for Accessibility in built environment" held on 3rd-14th October2022 at MNIT, Jaipur, India from 03-10-2022 to 14-10-2022

International Conference on 2nd Pan NIT HSS International Conference on Resilience and Transformation for Global Restructuring at MNIT Jaipur, Jaipur, India from 07-01-2022 to 09-01-2022

National FDP on ATAL Sponsored online Faculty Development Program on "Universal Design Approach for Built Environment" held on 23rd-27th August 2021. at MNIT, Jaipur, India from 23-08-2021 to 27-08-2021

National Conference on **CITIES 2050: Planning, Governance and Management** at MNIT, Jaipur, India from 23-07-2021 to 24-09-2021

National Conference on **Cities 2050: Planning, Governance and Management** at MNIT, jaipur, India from 04-07-2021 to 05-06-2021

National Short Term Course on **5 days online short term training program on "Advanced Planning Techniques and Data Analytics" from 17th-21st March 2021** at MNIT, Jaipur, India from 17-03-2021 to 21-03-2021

National Short Term Course on **Application of Remote Sensing and GIS in Urban Planning** at MNIT, Jaipur, India from 11-03-2021 to 15-03-2021

National Short Term Course on **Planning Techniques and Data Analytics using SPSS and Rcmdr** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 18-09-2020 to 22-09-2020

International Conference on International conference on Future Cities-2019 at IIT Roorkee, Roorkee, India from 11-12-2019 to 13-12-2019

National Short Term Course on **System Dynamics Simulation & Research Techniques** at MNIT Jaipur, Jaipur, India from 31-08-2019 to 04-09-2019

National Short Term Course on Indiginious Built Forms in Mountain Regions of India and Implementation of Building Codes at MNIT, jaipur, India Awards & Honours

"Dr. Pooja Nigam", CIEMA Research EXcellence Awards - 2022 for Outstanding contributions in the field of Architecture and Planning given by Regional Association for Security and Crisis Management, Serbia

"Dr. Pooja Nigam", Outstanding Woman Researcher in Architecture and Planning for Research in Architecture and Planning given by Venus International Foundation, Chennai, India

"Prof. Alok Ranjan", IIAPRESIDENT TROPHY FOR EXCELLENCE IN ARCHITECTURAL EDUCATION for NATCON 2020 given by PRESIDENT IIA

"Prof. Alok Ranjan", LIFE TIME ACHIEVMENT AWARD for ANNUAL CONVENTION given by IIA RAJASTHAN CHAPTER

"Prof. Alok Ranjan", BEST PAPER AWARD for INDIAN BUILDING CONGRESS given by IBC

"Dr. Pooja Nigam", Invited as Guest of Honour for National Talent Search Examination of Vidyarthi Vigyan Manthan (VVM) given by Vigyan Prasar in association with the NCERT, MHRD & Vijnana Bharati

"Dr. Ashwani Kumar", A3F Award for Architectural Journalism 2018 for for architecture and planning given by A3 Foundation Chandigarh

"Mr. Saurabh Kishore Ojha", Gold Medal for ACADEMIC given by SPA VIJAYAWADA

"Dr. Ashwani Kumar", A3F award for Architectural Journalism 2017 for Architectural Journalism 2017 given by A3 foundation awards

"Dr. Ashwani Kumar", Best student paper award for Exploring the imageability of urban form in walled city Jaipur given by 4th Annual International Conference on Architecture and Civil Engineering (ACE) 2016, GSTF Singapore

"Dr. Satish Pipralia", Best Student Paper award for Exploring the Imageability of Urban Form in Walled City Jaipur given by 4th Annual Conference on Architecture and Civil Engineering 2016, GSTF

Contact Us

# Dr. Satish Pipralia

Head, Department of Architecture and Planning Malaviya National Institute of Technology JLN Marg, Jaipur-302017 0141-2713330

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**Welcome to Department of Chemical Engineering** 

Department Login Faculty Login

# **PreviousNext**

# **Department by the Numbers**

24		
	Faculty	
640		
	Journal Publications	
718		
	Conf. Publications	
45		
	Research Projects	
101		
	PhD Awarded	

### **About the Department**

The Department of Chemical Engineering was commenced in the year 1988 with 30 undergraduate students in the B. Tech. Chemical Engineering programme and has been doing its best to bring about excellence in academics achieved in the last 25 years. The PG Programmes of MTech. in Chemical Engineering and Ph.D. was started in year 2006 and 2004 respectively. The current sanctioned strength of the B.Tech. Chemical Engineering Program and M.Tech Chemical Engineering Program is 100 and 25 respectively for Full time Courses. The department is well equipped with good undergraduate laboratories and research laboratories that have been

strengthened and modernized under TEQIP (World Bank) grants and Institute grants funded from MHRD. The Department aims to provide students with a balance of intellectual and practical expertise that enables them to serve the worldwide chemical industry as well as the societal needs. The programmes offered by the department are accredited by NBA and has educational objectives that are consistent with the vision and mission of the Department. The curriculum has been designed to meet the programme goals and objectives that lay more stress on learning under the guidance of a vibrant and highly gualified faculty. The department has also acquired standard chemical process simulators such as CHEMCAD and PROSIM a pro-simulator for design, simulation and control of various unit operations in the chemical industry for training the students. The department has many ongoing research projects being funded by many prestigious funding organizations such as Department of Science & Technology in areas of water and environmental research. Department of chemical engineering has got formal research and academic collaboration with chemical engineering department, University of Saskatchewan, Canada. The department has also got informal academic collaborations with IIP Dehradun, BARC Mumbai, IIT Delhi, IIT Bombay, ICT Mumbai, York University Toronto, University of Toronto and many other research/ academic organizations. Few PG students received Canadian Government fellowship under Graduate student exchange program to work at university of Saskatchewan as part of research work which gave them international exposure.

### Vision

To create a center for imparting technical education of international standards and conducting research at the cutting edge of technology to meet the current and future challenges of chemical and allied industries of the nation.

# Mission

The mission of the chemical engineering department is to impart quality education in chemical engineering and allied areas, foster research and development, evolve innovative applications of technologies, encourage entrepreneurship and ultimately mould younger generation capable of assuming leadership of the society for the betterment of the country in an ethical manner.

### **Contact Information**

# **Dr. Sushant Upadhyaya**

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# People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

# **Faculty**

# **Head of Department**

# Dr. Sushant Upadhyaya

**Associate Professor** 

Ph.D.,M.Tech.,B.Tech.

Research Interests: Transport Phenomena, Modelling And Simulation, Wastewater Treatment, Computational method for linear/non-linear problems, Polymer Process Modeling, Mass Transfer, Membrane Separation, Piping Engineering, Numerical Modelling, Computational Fluid Dynamics (CFD). <a href="mailto:supadhyay.chem@mnit.ac.in">supadhyay.chem@mnit.ac.in</a> 01412713586

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## **Professor-HAG**

# Prof. Satyendra Prasad Chaurasia

**Professor-HAG** 

Ph.D.(Chemical Engg.), M. Tech. (Chemical Engg.), B. Tech. (Chemical Engg.)

**Research Interests**: Biocatalysis, Fermentation Technology, Downstream Processing, Membrane Separation, Enzymatic Synthesis of DHA Rich TGs,, Biofuels (Biodiesel & Bioethanol), Bioethanol Production in MBR System, Desalination and Water Treatment, Membrane Distillation.

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#### **Professor**

# Prof. Kailash Singh

**Professor** 

Ph.D.(Chemical Engineering), M. Tech. (Chemical Engineering), B.E. (Chemical Engineering)

**Research Interests:** Modelling And Simulation, Advanced Process Control.

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# Prof. Raj Kumar Vyas

## **Professor**

Ph.D.(Chemical Engineering), M.E.(Chemical Engineering), B.E.(Pulp & Paper Engineering)

**Research Interests**: Chemical Reaction Engineering, Separation Processes, Industrial Pollution Abatement, Biotechnology.

rkvyas.chem@mnit.ac.in 01412713338

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# Prof. Suja George

#### **Professor**

Ph.D.(Chemical Engineering), M. Tech. (Chemical Engineering), B. Tech. (Chemical Engineering)

Research Interests: Environmental Engg., Advanced Process Control, Colloid And Interface Science,

Advanced Separation Processes, Water and Wastewater Treatment.

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#### Prof. SUSANTA KUMAR JANA

#### **Professor**

Ph.D.(Chemical Engineering), M.E.(Chemical Engineering), B. Tech.(Chemical Engineering)

**Research Interests**: Separation Technology (Mass Transfer with Chemical Reaction), Chemical Reaction Engineering, Industrial Pollution Abatement.

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# **Associate Professor**

## Dr. Madhu Agarwal

### **Associate Professor**

Ph.D.(Chemical Engineering), M. Tech.(Chemical Engineering), B. Tech.(Chemical Engineering)

**Research Interests**: Bioprocess Engineering, Biofuels, Biotechnology, Fluid Particle Mechanics, Adsorption, Energy Storage, Water and Wastewater Treatment, Waste to resource valorization, Catalysis and Reaction Mechanism.

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#### Dr. Manish Vashishtha

#### **Associate Professor**

Ph.D.( Chem. Engg.), M.Tech. (Process. Engg. & Design), B.Tech. ((Honours in Chem. Engg.)

**Research Interests**: Modelling And Simulation, Chemical Reaction Engineering, Thermodynamics, Colloid And Interface Science, Composite Materials, Soft Matter, Environmental Engg., Thin films.

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#### Dr. Prabhat Pandit

# **Associate Professor**

Ph.D.(Chemical Engineering), M.Tech.(Chemical Engineering), B.Tech.(Chemical Engineering)

**Research Interests:** Wastewater Treatment, Novel Separation Techniques.

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# Dr. Rajeev Kumar Dohare

# **Associate Professor**

Ph.D.(Chemical Engineering), M.Tech. (Chemical Engineering), B.Tech. (Chemical Engineering)

Research Interests: Modelling And Simulation, Advanced Process Control, Optimizations & Systems Applications, Solid Waste Management, Artificial Intelligence in Process Control, Emulsion Liquid Membrane.

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# Dr. Vikas Kumar Sangal

## **Associate Professor**

Ph.D.(Chemical Engineering), M. Tech. (Chemical Engineering), B.E. (Chemical Engineering)

**Research Interests**: Industrial Pollution Abatement, Modelling And Simulation, Photcatalytic oxidation, Water and Wastewater Treatment, Dividing wall column, Electrochemical Treatment.

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# **Assistant Professor**

# **Dr. Dipaloy Datta**

### **Assistant Professor**

Ph.D.(Chemical Engineering), M.E.(Chemical Engineering), B.E.(Chemical Engineering)

**Research Interests:** Adsorption, Reactive Extraction, Wastewater Treatment, Process Intensification, Separation Processes, Solvent Impregnated Resin, Textile Dyes Removal.

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# Dr. Hrushikesh M. Gade

#### **Assistant Professor**

Ph.D.(Chemical Engineering), M.E.(Chemical Engineering), B.E.(Chemical Engineering)

Research Interests: Molecular dynamics simulations, Self-assembly of nanostructured materials,

Molecular modeling, Advanced Composites, Composite and Nanocomposite materials.

hrushikesh.chem@mnit.ac.in

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# Dr. Lovjeet Singh

# **Assistant Professor**

Ph.D.(Chemical Engineering), M.Tech.(Chemical Engineering), B.Tech.(Chemical Engineering)

**Research Interests**: # Heterogeneous Catalysis for Environmental Applications and Green Technology, # Nanoscale Materials for Cleaner Environment and Sustainability, Chemical Reaction Engineering, Industrial Pollution Abatement.

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# Dr. Md Oayes Midda

## **Assistant Professor**

Ph.D.(Chemical Engineering), M.Tech.(Chemical Engineering), B.Tech.(Chemical Engineering), B.Sc(Chemistry (Hons))

**Research Interests**: Membrane Separation, Polymeric composite membranes, Industrial Gas Separation, Facilitated gas transport & Modeling, Nanoparticle synthesis, Adsorption, Water and Wastewater Treatment, Membrane bioreactor.

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#### Dr. Neetu Kumari

## **Assistant Professor**

Ph.D.(Chemical Engineering), M.Tech.(Chemical Engineering), B.Tech.(Chemical Engineering)

**Research Interests**: # Electrochemical Energy Conversion and Storage Systems, # Heterogeneous Catalysis for Environmental Applications and Green Technology, Molecular modeling, Carbon dioxide utilization, solid oxide fuel cell or electrolysis cell.

neetu.chem@mnit.ac.in

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#### Dr. Rohidas Gangaram Bhoi

#### **Assistant Professor**

Ph.D.(Chemical Engineering), B.E.(Chemical Engineering)

**Research Interests**: Chemical Reaction Engineering, Mass Transfer, Pyrolysis, Biofuels (Biodiesel & Bioethanol), Biomass to Bioenergy.

rohidas.chem@mnit.ac.in 01412713317

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#### Dr. Shiv Om Meena

### **Assistant Professor**

Ph.D.(Chemical Engineering), M. Tech. (Chemical Engineering), B.E. (Chemical Engineering)

**Research Interests**: Petroleum Refinery Engineering, Fluid Dynamics, Modelling And Simulation, Chemical Reaction Engineering, Water and Wastewater Treatment.

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#### Dr. Sonal

#### **Assistant Professor**

Ph.D.(Chemical Engineering), M.Tech.(Chemical Engineering), B.Tech.(Chemical Engineering) Research Interests: # Heterogeneous Catalysis for Environmental Applications and Green Technology, Biofuels, Catalysis and Reaction Mechanism, Chemical Reaction Engineering, Chemical kinetics and Dynamics, Carbon dioxide utilization, solid oxide fuel cell or electrolysis cell, Carbon Capture & Sequestration.

sonal.chem@mnit.ac.in View Detailed Profile Google Scholar Profile ResearchGate Profile

# Dr. Subbaramaiah V

#### **Assistant Professor**

Ph.D.(Chemical Engineering), M.Tech.(Chemical Engineering), B.Tech.(Chemical Engineering) Research Interests: Novel Separation Techniques, Chemical Reaction Engineering, Carbon Capture & Sequestration, # Heterogeneous Catalysis for Environmental Applications and Green Technology, Petroleum Refinery Engineering, Industrial Pollution Abatement, Water and Wastewater Treatment, Advanced Oxidation Technique, Chemical Process Safety and Disaster Management.

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# Dr. Surajit Ghosh

#### **Assistant Professor**

Ph.D.(Chemical Engineering), M.E.(Chemical Engineering), B.Tech.(Chemical Engineering) Research Interests: # Nanomaterials Chemistry for New Materials, Smart Materials and Nanoscale Composites, # Heterogeneous Catalysis for Environmental Applications and Green Technology, # Nanoscale Materials for Cleaner Environment and Sustainability, # Nanoparticle Synthesis, Growth and Assembly, # Engineered Nanomaterials/Composites for Electrocatalysis, Waste to resource valorization, Composite and Nanocomposite materials, Polymeric materials, Polymer solar cell, Polymer Process Modeling, Polymer, Additive Manufacturing.

surajit.chem@mnit.ac.in View Detailed Profile Google Scholar Profile

#### Dr. U. K. ARUN KUMAR

#### **Assistant Professor**

Ph.D.(Chemical Engineering), M.E.(Chemical Engineering), B.E.(Chemical Engineering)

Research Interests: Mass Transfer, Microfluidics for chemical processes - separation and purification, Chemical Engineering Thermodynamics - Physico-Chemical property measurements and simulations, Carbon Capture & Sequestration, Wastewater Treatment.

ukarunkumar.iitd@gmail.com 01412713513

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# Dr. Vijayalakshmi Gosu **Assistant Professor**

Ph.D.,M.Tech.,B.Tech.

Research Interests: # Nanoscale Materials for Cleaner Environment and Sustainability, # Heterogeneous

Catalysis for Environmental Applications and Green Technology, Advanced Oxidation Technique, Catalysis and Reaction Mechanism, Water and Wastewater Treatment, Adsorption.

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# Dr. Virendra Kumar Saharan

# **Assistant Professor**

Ph.D.(Chemical Engineering), M. Tech.(Chemical Engineering), B.E.(Chemical Engineering)

Research Interests: Process Intensification, Wastewater Treatment, Advanced Oxidation Technique,
Cavitation, Sonochemistry, Emulsification, Photoatalytic oxidation, Nanoparticle synthesis.

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Mr. S. N. Reddy Y
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# Mr. Sameer Chadar Senior Technician

M.Tech(Electronics), B.E.(Electronics).

sameerchadar@mnit.ac.in

# Ms. Babita Aithani Senior Assistant

baithani@gmail.com

Research scholars:

Mr. Sarmad Rizvi

2021rch9019

Research Interests: Molecular dynamics investigations of self assembly of nanostructures for novel

materials development

Supervisors: Dr. Hrushikesh M. Gade/ Dr. Manish Vashishtha

2021rch9019@mnit.ac.in

Mrs. Gayatri Rajput

2021RCH9016

**Research Interests :**Advanced oxidation of waste water **Supervisors :**Dr.V.Subbaramaiah / Dr.Vikas K. Sangal

2021rch9016@mnit.ac.in

Mr. Udit Khandara

2021rch9015

Research Interests: Development of sustainable heterogeneous catalyst for the valorisation of glycerol

Supervisors: Dr. Vijayalakshmi Gosu

2021rch9015@mnit.ac.in

Mr. Neetesh Kumar Dehariya

2020rch9553

Research Interests: Wastewater treatment by Advanced Oxidation Process: Parametric Optimization &

Kinetic study

Supervisors :Dr. Vikas K Sangal

2020rch9553@mnit.ac.in

Mr. Satyanarayana Reddy Y

2020rch9552

**Research Interests**: Development of novel electrodes for wastewater treatment by electrochemical

methods

Supervisors: Dr. Vikas K Sangal

2020rch9552@mnit.ac.in

Mr. Pushpendra Kushwaha

2020rch9551

Research Interests: Extraction/synthesis of chemicals for water and waste water treatment

Supervisors: Dr Madhu Agarwal

2020rch9551@mnit.ac.in

Mr. Rupak Kumar Singh

2020rch9550

Research Interests: Development of heterogeneous catalysts for the production of oxygenated fuel

additive

Supervisors: Dr. Vijayalakshmi Gosu

2020rch9550@mnit.ac.in

Mr. Rajeshwar Keshavrao Kholapure

2020RCH9053

Research Interests: Separation of Azeotropic Mixture by using Air Gap Membrane Distillation

Supervisors: Prof. Kailash Singh/ Dr. Sushant Upadhyaya

2020RCH9053@mnit.ac.in

Mr. Yogesh Ashoke Bhadange

2019rch9554

**Research Interests:** Studies of extraction of bioactive components from natural ingredients.

Supervisors: Dr. Virendra Kumar Saharan

2019rch9554@mnit.ac.in

Mr. Mohd Mohsin Ikram

2019rch9521

Research Interests: Studies on the conversion of Glycerol into value added products

Supervisors: Dr. Virendra Kumar Saharan

2019rch9521@mnit.ac.in

Mr. Aamir Baig

2019RCH9520

**Research Interests**: Catalytic steam reforming of bio oil for renewable hydrogen generation

**Supervisors :** Dr. Sonal 2019RCH9520@mnit.ac.in

Ms. Meenu

2019rch9515

Research Interests: Experimental and Modeling studies on Controlled Release Urea using Mustard straw

derived biochar coating

Supervisors: Dr. Shiv Om Meena

2019rch9515@mnit.ac.in

Mr. Vinod Kumar Dhakad

2019rch9165

**Research Interests**: Synthesis of PCC from marble waste along with its utilization in paper and manufacturing of other valuable products

**Supervisors :** Prof. S. K. Jana 2019rch9165@mnit.ac.in

Mr. Ravi Kumar Parihar

2019RCH9164

Research Interests: Anaerobic fluidized bed membrane bioreactor for wastewater treatment and fouling

mitigation

Supervisors: Dr. Md Oayes Midda/Prof. S.P. Chaurasia

2019rch9164@mnit.ac.in

Ms. Harshika Suman

2019rch9162

Research Interests: Study for the Treatment of Tannery Effluent by Electrochemical Methods

Supervisors : Dr. Vikas K Sangal

2019rch9162@mnit.ac.in

Ms. Sonal Rajoria

2019rch9160

Research Interests: Treatment of electroplating industry wastewater using electrochemical process

Supervisors: Dr. Manish Vashishtha

2019rch9160@mnit.ac.in

Mr. Prathwiraj Meena

2019rch9157

Research Interests: Catalytic Pyrolysis of Plastic

Supervisors: Dr. Rohidas G. Bhoi

2019rch9157@mnit.acin

Mr. Durgesh Singh Songera

2019RCH9151

Research Interests: Upgradation of bio-oil to biofuel by catalytic hydro-deoxygenation process

Supervisors: Dr. Virendra Kumar Saharan

durgesh.songera@gmail.com

Ms. Shivika Sharma

2019rch9149

**Research Interests**: Reduction of CO2 into syngas using Solid Oxide Electrolysis Cells (SOEC)

Supervisors: Dr. Neetu Kumari

2019rch9149@mnit.ac.in

Ms. Divya Gaur

2019rch9098

Research Interests: Mathematical Modelling and Experimental study on removal of benzene and toluene

using AGMD

Supervisors: Dr. Sushant Upadhyaya/Dr. Kailash Singh

2019rch9098@mnit.ac.in

Mr. Sameer Imdad

2019rch9093

Research Interests: Removal of heavy metals from industrial wastewater using supported liquid

membrane

Supervisors: Dr. Rajeev Kumar Dohare

2019rch9093@mnit.ac.in

Mrs. Neha Pal 2019RCH9047

Research Interests: Development of value-added product from waste

**Supervisors :** Dr. Madhu Agarwal 2019RCH9047@mnit.ac.in

Ms. Ketaki Tikekar

2019RCH9039

Research Interests: Model based control of fixed bed reactor and membrane separation of products

Supervisors: Prof. Kailash Singh/Dr. Sushant Upadhyaya

2019rch9039@mnit.ac.in

Ms. Surabhi Singh

2019rch9026

Research Interests: Bio ethanol Production from Lignocellulosic biomass

Supervisors: Prof. Suja George/Dr Rohidas G. Bhoi

2019rch9026@mnit.acin

Mr. Ramesh Kumar

2019rch9003

Research Interests: Thermodynamic Studies and Performance Analysis of Photovoltaic Operated Energy

Conversion Systems and Their HybridCombinations

Supervisors: Dr. Manish Vashishtha/ Dr. Sushant Upadhyaya

2019rch9003@mnit.ac.in

Jyoti Katiyar

2018RCH9107

**Research Interests**: Degradation of biorefractory pollutants with photocatalytic process comprising ultrasound and hydrodynnamic cavitation; A perspective to the development of novel nano photocatalyst.

Supervisors: Dr. Virendra Kumar Saharan

2018RCH9107@mnit.ac.in

Ms. Karishma Maheshwari

2018RCH9106

**Research Interests:** Experimental studies on treatment of RO reject water.

**Supervisors**: Dr. Madhu Agrawal

2018RCH9106@mnit.ac.in

Ms. Anju Gupta

2018RCH9090

Research Interests: Reactive Adsorption Studies on Acyclovir Removal from Aqueous Solution using Solid

Reactive Adsorbent

**Supervisors :** Dr. R. K. Vyas 2018RCH9090@mnit.ac.in

# Ritu Chaudhary

2018RCH9038

Research Interests: Study the effect on

Supervisors: Dr. Vikas Kumar Sangal/ Dr. Sushant Uphadhaya

2018rch9038@mnit.ac.in

#### Meenakshi Yadav

2018RCH9037

Research Interests:: Preparation and characterization of hydrophobic membrane for VMD.

Supervisors: Dr. Sushant upadhyaya/ Dr. Kailash singh

2018rch9037@mnit.ac.in

Mr. Pappu Kumar Burnwal

2018RCH9035

Research Interests: Synthesis and characterization of membrane for VMD

Supervisors: Prof. S.P. Chaurasia

2018rch9035@mnit.ac.in

Dr. Tarun Kumar Chaturvedi

2017rch9034

Research Interests: Solvent extraction of heavy metal ions from wastewater using reverse micelles

Supervisors: Dr. Prabhat Pandit/Dr. Sushant Upadhyaya

2017rch9034@mnit.ac.in

## Rohitash Kumar

2016RCH9019

Research Interests: Absorption of Carbon Dioxide using Micro-Channels

Supervisors: Dr. U. K. Arun Kumar

2016RCH9019@mnit.ac.in

Phd awarded

Ms. Anjali Awasthi

2017RCH9044

Thesis Title: Application of Solvent Impregnated Resins for the Treatment of Wastewater Containing

Reactive Dyes

Supervisors: Dr. Dipaloy Datta

Year of Award: 2022 2017rch9044@mnit.ac.in Ms. Arshia Khan

#### 2016RCH9525

Thesis Title: Development of Photocatalyst and Adsorbent from Marble Waste: An Application for the

Removal of Biorefractory Pollutants.

Supervisors :Dr. Suja George

Year of Award :2022

2016rch9525@mnit.ac.in 7389484664

# Ms. Kalpana Patidar

#### 2016RCH9526

Thesis Title: Studies on energy extraction and production of value added product from mustard crop

residues.

Supervisors: Dr. Manish Vashishtha

Year of Award: 2022

2016RCH9526@mnit.ac.in 8269798592

#### Dr. Prashant Shrivastava

#### 2015RCH9036

Thesis Title: Synthesis of Precipitated Calcium Carbonate by Carbonation of Calcium Chloride in Bubble

Column and Stirrer Reactors **Supervisors :**Dr. S. K. Jana **Year of Award :**2021

2015rch9036@mnit.ac.in

# Dr. Priya Pal

### 2014RCH9066

Thesis Title: Synthesis, characterization and performance study of PVDF membranes for liquid mixture

(glycerol-water) And gaseous mixture (H2-CO2/N2) separation

**Supervisors**: Prof.S.P.Chaurasia/Dr.SushantUpadhyay

Year of Award :2021 2014rch9066@mnit.ac.in

# Mr. Yogendra Singh Solanki

#### 2017RCH9506

Thesis Title: Development of defluoridation kit for domestic drinking water

**Supervisors:** Dr. Madhu Agrawal

Year of Award: 2021

2017rch9506@mnit.ac.in 8935928802

# Dr. Muzaffar Iqbal

#### 2017RCH9504

Thesis Title: Synthesis and Characterization of Solvent Impregnated Resins for the Treatment of Simulated

Textile Dye using Ultrasonic Technology

Supervisors: Dr. Dipaloy Datta

Year of Award: 2021

2017RCH9504@mnit.ac.in 8929393434

Dr. Shivali Arora

2016rch9003

Thesis Title: Green Process: Development of green catalyst for the synthesis of glycerol carbonate from

waste glycerol

Supervisors: Dr. V. Subbaramaiah

Year of Award :2021 2016rch9003@mnit.ac.in

## Dr. Prashant Shrivastava

#### 2015RCH9036

Thesis Title: Synthesis of Precipitated Calcium Carbonate by Carbonation of Calcium Chloride in Bubble

Column and Stirrer Reactors **Supervisors**: Prof. S. K. Jana

Year of Award: 2021 2015rch9036@mnit.ac.in

## Dr. Sakshi Batra

#### 2016RCH9024

Thesis Title: Removal of Endocrine Disrupting Chemical from wastewater using Solvent Impregnated Resin

Supervisors: Dr. Dipaloy Datta

Year of Award: 2020

2016RCH9024@mnit.ac.in 7906308408

# Dr. Swapnil SukhadeoBargole

# 2016RCH9008

Thesis Title: Value added products from waste cooking oil (WCO) using cavitation: process development

and intensification

Supervisors: Dr. Virendra Kumar Saharan

Year of Award :2020 2016rch9008@mnit.ac.in

#### Dr. Prakash Kumar

### 2014rch9543

Thesis Title: Fluoride adsorption studies on calcium and magnesium amended alumina for drinking water

application

Supervisors: Prof. Suja George

Year of Award: 2020 2014rch9543@mnit.ac.in

# Dr. Renu

# 2014RCH9064

Thesis Title: Adsorptive Removal of Copper, Cadmium and Chromium From Waste Water: Modelling and

**Experimental Study** 

Supervisors: Dr. Madhu Agarwal / Prof. Kailash Singh

Year of Award :2020 renubisht123@gmail.com

Dr. Lokesh Kumar

#### 2015RCH9506

Thesis Title: Utilization of Marble Waste Slurry for the Synthesis of PoP through Sulfation and

Desulfurization of Flue Gases

Supervisors: Prof. Susanta Kumar Jana

Year of Award: 2020 2015rch9506@mnit.ac.in

# Dr. Sudhanshu Singh

#### 2015RCH9505

Thesis Title: Carboxylic Acid Separation from Aqueous Solution in Microchannel

Supervisors: Dr. U.K. Arun Kumar

Year of Award: 2020

2015rch9505@mnit.ac.in 9161734509

# Dr. Prakash Kumar Singh

#### 2014RCH9543

Thesis Title: Fluoride adsorption studies on calcium and magnesium amended alumina for drinking water

application

Supervisors : Dr. Suja George

Year of Award: 2020

2014RCH9543@mnit.ac.in

# Dr. PRERANA SIKARWAR

### 2015RCH9503

Thesis Title: Catalytic desulfurization & denitrogenation of liquid fuels

Supervisors: Dr. V. Subbaramaiah

Year of Award: 2019 2015rch9503@mnit.ac.in

### Dr. Jitendra Carpenter

### 2014RCH9505

Thesis Title: Cavitation assisted synthesis of emulsion based delivery systems

Supervisors: Dr. Virendra Kumar Saharan

Year of Award: 2019 2014rch9505@mnit.ac.in

#### Dr. PreranaSikarwar

#### 2015rch9503

Thesis Title: Catalytic desulfurization &denitrogenation of liquid fuels

Supervisors: Dr. V. Subbaramaiah

Year of Award: 2019 2015rch9503@mnit.ac.in

# Dr. Shivendu

## 2014rch9057

Thesis Title: Studies on process intensification of treatment techniques for tannery waste water.

Supervisors: Prof. Suja George

Year of Award :2019 2014rch9057@mnit.ac.in

# Dr. Swati Dubey **2015RCH9033**

Thesis Title: Experimental Study OnDefluoridation Of Drinking Water Using Alum & Poly-Aluminium

Chloride And Speciation Of Alumino-Fluoro Complexes **Supervisors :**Dr. Madhu Agarwal and Prof. A.B. Gupta

Year of Award: 2019

swatidubey2021@gmail.com

### Dr. Shiv Om Meena

#### 2012RCH9002

Thesis Title: Experimental and Modelling Studies on Neem (AzadirachtaIndica) Oil Coated Urea

Supervisors: Dr. Manish Vashishtha

Year of Award: 2019 2012rch9002@mnit.ac.in

# Dr. Rakesh Baghel

## 2014RCH9050

Thesis Title: CFD Modeling and Experimental Study of Vacuum Membrane Distillation for Removal of Dyes

from Aqueous Solutions

**Supervisors**: Dr. Sushant Upadhyaya (Supervisor) & Dr. S. P. Chaurasia (Co-Supervisor)

Year of Award: 2019

rakeshbaghel2509@gmail.com

# Dr. Avdesh Singh Pundir

#### 2013RCH9513

Thesis Title: Control of non-isothermal fixed-bed reactor

Supervisors: Prof. Kailash Singh

Year of Award: 2019 2013rch9513@mnit.ac.in

# Dr. RenuBisht **2014RCH9064**

**Thesis Title**: Heavy Metal removal from wastewater **Supervisors**: Dr. Madhu Agarwal / Prof. Kailash Singh

Year of Award :2019 renu.bisht123@gmail.com

#### Dr. SaritaKalla

#### 2015RCH9022

Thesis Title: Mathematical modeling and experimental study of air gap membrane distillation for

separation of HCI/water azeotrope

Supervisors: Dr. Sushant Upadhyaya / Prof. Kailash Singh

Year of Award: 2019

sarita87mishra@gmail.com

Ms. Swati Dubay 2015RCH9033

**Thesis Title :**Defluoridation using continuous process **Supervisors :**Dr. Madhu Agarwal, Prof. A.B. Gupta

Year of Award: 2019 2015rch9033@mnit.ac.in

Dr. Gaurav Kataria **2014RCH9514** 

Thesis Title: Soft sensing and control of product composition of reactive distillation column using dynamic

neural network

Supervisors: Prof. Kailash Singh

Year of Award :2018 gkataria64@gmail.com

Dr. Komal Sharma

2014RCH9051

Thesis Title: Removal of Textile Dyes from Aqueous Solution using Reactive Adsorption

Supervisors: Prof. R. K. Vyas/ Prof. Ajay Dalai

Year of Award: 2018 knkomal@gmail.com

Dr. Dhiraj Mehta **2013RCH9010** 

Thesis Title: Utilization of Marble waste into value added product-Hydroxyapatite

Supervisors: Dr. Suja George

Year of Award :2018 2013RCH9010@mnit.ac.in

Dr. Ajay Sujan **2013RCH9528** 

Thesis Title: Studies on Hydrodynamic and Mass Transfer Parameters in a Bubble Column

Supervisors : Dr. R. K. Vyas

Year of Award: 2018 ajaysujan@gmail.com

Dr. Sunil Rajoriya

2013RCH9519

Thesis Title: Development of Advanced Oxidation Processes (AOPs) based on Hydrodynamic Cavitation

for the degradation of Bio-refractory Pollutants

Supervisors: Dr. Virendra Kumar Saharan

Year of Award :2018 sunilrajoriya@gmail.com

Dr. Avanish Kumar

#### 2013RCH9066

Thesis Title: Absorption accompanied by chemical reaction of SO2 in gas-liquid and gas-liquid-solid

systems

Supervisors: Prof. S. K. Jana

Year of Award :2018 2013rch9066@mnit.ac.in

Dr. Jharna Gupta **2013RCH9542** 

Thesis Title: Biodiesel synthesis in helical coil reactor.

Supervisors: Dr. Madhu Agarwal, Dr. A.K. Dalai

Year of Award: 2018 2013rch9542@mnit.ac.in

Dr. AbhayDinker **2013RCH9067** 

Ph.D.

Thesis Title: Experimental Thermal Performance Study on Heat Storage Unit Using Beeswax and Graphite

Supervisors: Dr. Madhu Agarwal

Year of Award: 2017 dinkerabhay@hotmail.com

Dr. Sruti Chakraborty

2012RCH9520

Thesis Title: Moisture Dynamics in Oil Filled Power Transformers

Supervisors: Dr. Manish Vashishtha

Year of Award: 2017 2012rch9520@mnit.ac.in

Dr. Saakshy **2011RCH7109** 

Thesis Title: Treatment, Recycle and Reuse of Waste from Handmade Paper Industry

Supervisors: Prof. Kailash Singh/ Prof. A.B. Gupta

Year of Award: 2017

saakshyagarwal@gmail.com

Dr. Sruti Chakraborty

2012RCH9520

Thesis Title: Moisture Dynamics in Oil Filled Power Transformers

Supervisors: Manish Vashishtha

Year of Award: 2017 2012rch9520@mnit.ac.in Dr. Jitendra Kumar

#### 2011rch7107

Thesis Title: Comparative study on performance of PTFE and PVDF membranes for water desalination

using Vacuum Membrane Desalination **Supervisors**: Prof.S.P.Chaurasia

Year of Award: 2017 2011rch7107@mnit.ac.in

Dr. Poonam Mondal

2012RCH9053

Thesis Title: Defluoridation Studies using Calcium based compounds

Supervisors: Prof Suja George

Year of Award: 2016

poonam.mbiotech@gmail.com

Dr. Manisha Sharma

2010RCH101

Thesis Title: Experimental study and mathematical modeling of reactive adsorption of phenol

Supervisors: Prof. R.K. Vyas / Prof. Kailash Singh

Year of Award: 2015

manisha.sharma@jaipur.manipal.edu

Dr. Isha Arya 2008RCH101

Thesis Title: Analyses of gas-liquid and gas-liquid-solid foam-bed rectors

Supervisors: Prof. S. K. Jana

Year of Award: 2015 2008rch101@mnit.ac.in

Dr. D. R. Jangid

2007RCE108

Thesis Title: Performance Analysis of Activated Sludge Process and Enhancement of Energy Yield using

Excess Sludge as a Flocculent in the Primary Settling Tank - A Case Study of STP Delawas

Supervisors: Prof. A. B. Gupta/ Prof. R. K. Vyas

Year of Award: 2015 jangid60dr@gmail.com

Dr. Parul Bhatt

2008RCH901

Thesis Title: Studies on Removal of Reactive Blue 19 and Direct Red 81 Dyes from Wastewater using

Adsorption and Electrocoagulation

Supervisors: Prof. R. K. Vyas/ Dr. PrabhatPandit

Year of Award: 2014

parul.bhatt2008@gmail.com

Dr. Sushant Upadhyaya

2008RCH105

Thesis Title: Mathematical modeling and experimental study of vacuum membrane distillation for

desalination

Supervisors: Prof. S.P. Chaurasia / Prof. Kailash Singh

Year of Award: 2014

supadyay.chem@mnit.ac.in

Dr. Monika Maheshwari

2007RCH101

Thesis Title: Studies on Removal of Ciprofloxacin Hydrochloride from Aqueous Solutions using Adsorption

and Advanced Oxidation Processes

Supervisors: Prof. R. K. Vyas

Year of Award: 2014

maheshwari.monika16@gmail.com

Ms. Neha Sharma

2008rch103

Thesis Title: Machine learning based control of TAME and isopropyl acetate reactive distillation column

Supervisors: Prof. Kailash Singh

Year of Award: 2014

nehasharma103@gmail.com

Dr. Swati Jain

2009RCH502

Thesis Title: Studies on Adsorptive Removal of Acyclovir from Aqueous Solutions

Supervisors: Dr. PrabhatPandit / Prof. R. K. Vyas

Year of Award :2013 swatijainbio@gmail.com

Dr. KritiBhandari

2007RCH107

Thesis Title: Studies on synthesis of DHA rich triglycerides from fish oil

Supervisors: Prof.S.P.Chaurasia/Prof.Alok Gupta

Year of Award :2012 2007rch102@mnit.ac.in

Dr. Ravi Dhabhai

2007RCH103

Thesis Title: Studies on Bioethanol production from lingo-cellulosic feedstock

Supervisors: Prof.S.P.Chaurasia

Year of Award: 2012 2007rch103@mnit.ac.in

Dr. Madhu Agarwal

0690942

Thesis Title: Studies on preparation and characterization of biodiesel

Supervisors: Prof. S.P. Chaurasia / Prof. Kailash Singh

Year of Award: 2011

magarwal.chem@mnit.ac.in

Dr. Suja George

036004

Thesis Title: Modeling of Interactions of Aluminium and Fluorides in Defluoridation of water

Supervisors: Dr Prabhat pandit/ Prof A.B.Gupta

Year of Award: 2009 sgeorge.chem@mnit.ac.in

# **Facilities**

Major Equipments available in Chemical Engineering Department

# **Momentum Transfer Operations Laboratory (CHP213)**

- 1. Pipe Friction Apparatus
- 2. Venturi& Orifice Meter
- 3. Pipes And Fittings
- 4. Benoulli's Apparatus
- 5. Flow Through Fluidized Bed
- 6. Flow Through Packed Bed
- 7. Reynolds Apparatus

# Fluid Particle Mechanics Laboratory (CHP212)

- 1. Power Consumption in Agitated Vessel
- 2. Sedimentation Apparatus
- 3. Rotary Vacuum Filter
- 4. Plate And Frame Filter Press.
- 5. Sieve Shaker
- 6. Cyclone Separator
- 7. Drag Coefficient Apparatus
- 8. Jaw Crusher
- 9. Ball Mill
- 10. Elutriator

For more details Click here.

# **Heat Transfer Laboratory (CHP214)**

- 1. Refrigeration & Air Conditioning Lab
- 2. Thermal Conductivity of given metal rod
- 3. Heat Transfer through Composite Wall
- 4. Thermal conductivity of an insulating powder material
- 5. Unsteady state heat transfer by lumped capacitance
- 6. Natural convection apparatus
- 7. Forced convection apparatus
- 8. Double Pipe Heat exchanger

- 9. Shell & Tube Heat exchanger
- 10. Emissivity apparatus
- 11. Film and Drop wise condensation apparatus
- 12. Heat Transfer in Agitated vessel

# **Chemical Reaction Engineering Laboratory (CHP311)**

- 1. Batch Reactor
- 2. Plug Flow Reactor
- 3. CSTRs in Series
- 4. Muffle Furnace
- 5. RTD Studies in A Packed Bed Reactor
- 6. Packed Bed Recycle Reactor
- 7. Spinning Basket Reactor
- 8. UV Reactor

# **Petroleum Refinery Engineering Laboratory (CHP314)**

- 1. Abel's Flash Point Apparatus
- 2. Cloud & Pour Point Apparatus
- 3. Smoke point apparatus
- 4. Penske Marten FP apparatus
- 5. Aniline Point Apparatus
- 6. Bomb Calorimeter Apparatus
- 7. Carbon Residue Apparatus
- 8. Distillation Apparatus
- 9. Reid Vapor pressure apparatus
- 10. Saybolt's Viscometer

# **Process Dynamics and Control Laboratory (CHP316)**

- 1. Response
- 2. Response of sinusoidal input
- 3. Interacting and non-interacting system
- 4. Second order system (water-mercury manometer)
- 5. Control valve characteristics
- 6. Temperature control trainer
- 7. Multi variable control trainer
- 8. Multi process control trainer
- 9. U tube manometer three different fluids

# **Mass Transfer Laboratory (CHP313)**

- 1. Forced Draft Tray Dryer
- 2. Cooling tower Apparatus
- 3. Wetted Wall Column Unit.

- 4. Hydrodynamic Of Packed Column Apparatus
- 5. Batch Crystallizer
- 6. Bubble Cap Distillation Column
- 7. Batch Solid-Liquid Extraction Apparatus
- 8. Stephen Tube Apparatus
- 9. Mass Transfer In Liquid

#### **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

# **Journal Publications (640)**

# 2024

Sonal Rajoria, Manish Vashishtha, Vikas K Sangal, "Oxidative degradation of electroplating wastewater by an electro-Fenton process using GO/TiO2NTs electrode", Environmental Engineering Research Volume: 29(1) / 230056 / 2024

# 2023

Rajpal Singh Shekhawat, Madhu Agarwal, " [HTML] from sciencedirect.com Spent bleaching earth co-processing in cement kiln & its effect on physical properties of cement", Materials Today: Proceedings Volume:76 / / 2023

Pushpendra Kushwaha, Madhu Agarwal, "Adsorption of cationic dye by using metal industry solid waste as an adsorbent", Materials Today: Proceedings Volume:78 / / 2023

Jasasmita Das, Shweta Rawat, Abhijit Maiti, Lovjeet Singh, Debabrata Pradhan, Paritosh Mohanty, "Adsorption of Hg2+ on Cyclophosphazene and Triazine Moieties based Inorganic-organic Hybrid Nanoporous Materials Synthesized by Microwave Assisted Method", Separation and Purification Technology Volume: 306 / 122662 / 2023

### **Projects**

- Research Projects
- Testing & Consultancy Projects

# Research Projects

Show	_	entries

Search:

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Neetu Kumari	Development of Novel Electrocatalyst for the Efficient Conversion of Biomass Derived Syngas to Electrical Power Using Solid Oxide Fuel Cell Technique	Science and Engineering Resear Board (SERB), DST, Gov. of Inc.
2	Dr. Virendra Kumar Saharan	Development of Greywater Disposal site in Surajgarh, Jhunjhunu, Rajasthan	Municipal Council Surajgarh, Jhunjhunu, Rajasthan
3	Dr. Vikas Kumar Sangal	Study of Hydrodynamics & Efficiency of Effluent Treatment Process" of STP situated in Jaisinghpura Khor Jaipur	Municipal Corporation, Jaipur Heritage, Jaipur, Govt. of Rajastl
4	Dr. Vikas Kumar Sangal	Fabrication of Hydrophobic Membrane for Seawater Desalination	Redox Engg. Pvt. Ltd
5	Dr. U. K. ARUN KUMAR	Design and Development of Energy Efficient Microchannel Based Solvent Recovery Unit for Fermentation and Active Pharmaceutical Ingredient (API) Production	Core Research Grant-Science an Engineering Research Board (SERB)-DST
6	Dr. Madhu Agarwal	Prefeasibility study for extraction of value adding metals from jarosite	Hindustan zinc limited
7	Dr. Subbaramaiah V	Industrial hygiene of silica dust exposure in Rajasthan- Spatial distribution, diagnosis, risk assessment, and its management	Directorate Specially Abled Pers Govt of Rajasthan, India
8	Dr. Vikas Kumar Sangal	Study for performance enhancement of ETP	Mayur Uniquoters Limited
9	Dr. Virendra Kumar Saharan	Preparation of district environment management plan for alwar	Environmental committee and district collector alwar, Rajastha
10	Dr. Rohidas Gangaram Bhoi	Design and development of high flow, high purity oxygen concentrator using indigenous components	MNIT

# **Patents**

"Removal of Ionic Dyes from Water by Solvent Extraction Using Reverse Micelles", P Pandit and S Basu, Reg.No. CN103964531A - [Indian Institute of Technology Delhi] Dt.22-12-2020

**"A composite electrocatalyst for CO 2 reduction through electrolysis"**, Neetu Kumari, Suddhasatwa Basu, Ali Haider, T. P. Yuvraj, R.K. Kashyap , Reg.No. 335419 [India] Dt.03-04-2020 Event Organized

National Short Term Course on **Skill Development Training Programme** at MNIT Jaipur, Jaipur, India from 18-07-2023 to 22-07-2023

National Seminar on **Career Counselling Programme** at MNIT Jaipur, Jaipur, India from 21-06-2023 to 21-06-2023

National FDP on **Advances in Infrastructure Interventions for Safe Storage, Handling and Transportation of Petroleum Products** at Malaviya National Institute of Technology, Jaipur-302017 (Rajasthan), India from 30-01-2023 to 10-02-2023

International Conference on International Conference on 'Advances in Chemical and Materials Sciences (ACMS 2022) at Heritage Institute of Technology, Kolkata, Kolkata, India from 14-04-2022 to 16-04-2022

International Conference on International Conference on Desalination and Water Treatment: Recent Technological Advancement, Challenges and Opportunities and Annual Congress of InDA (InDACON - 2022) at MBM Engineering College Jodhpur, Jodhpur, India from 26-03-2022 to 27-03-2022

National Short Term Course on **Online Internship Programme for IICHECourse Name: Biochemical Engineering Online** at MNIT, JAIPUR, India from 26-02-2022 to 26-03-2022

National Short Term Course on **System Design, Optimisation and Control** at Malaviya National Institute of Technology, Jaipur, India from 21-02-2022 to 25-02-2022

National Short Term Course on **Process Simulators for Chemical Engineering Applications (Online mode)** at MNIT Jaipur, Jaipur, India from 13-01-2022 to 17-01-2022

National Short Term Course on **Advances in Pollution Control Technologies and Sustainable Development** at MNIT JAIPUR, Jaipur, India from 02-08-2021 to 06-08-2021

International Conference on **Advances in Chemical, Biological and Environmental Engineering** (ICACBEE-2021) at M.N.I.T JAIPUR, JAIPUR, INDIA

# **Awards & Honours**

**"Dr. Sonal** ", SERB International Research Experience (SIRE) for To visit Washington University St. Louis USA for six month as visiting researcher given by SERB India

"Dr. Shiv Om Meena", Session Chair for International Conference on Chemical Engineering: Enabling Transition Towards Sustainable Future, In given by Department of Chemical Engineering, Indian Institute of Technology, Roorkee

"Dr. Madhu Agarwal", Chaired a session for International Conference on Advances in Chemical and Materials Sciences given by Indian Institute of Chemical Engineers, Kolkata, India "Dr. Madhu Agarwal", Chaired a Session for International conference on Water Desalination, Treatment & Management (InDACON 2022) given by MBM Engineering College Jodhpur, Indian Desalination Association (InDA) and Defence Research & Devel

"Dr. Sonal", Distinction in Doctoral Thesis for given by Indian Institute of Technology Delhi

"Dr. Neetu Kumari", Distinction in Doctoral Thesis Titled as Development of Ceria Based Catalyst for Solid Oxide Cell, for given by Indian Institute of Technology Delhi, New Delhi, India

"Dr. Virendra Kumar Saharan", Featured in top 2 percent scientist of the world in 2022 for given by Published by Elsevier and authored by John P.A. Ioannidis et al.

"Dr. Madhu Agarwal", Chaired a session for International Conference on Biotechnology for Sustainable Agriculture, Environment and Health (BSAEH given by MNIT Jaipur, India

"Dr. Virendra Kumar Saharan", Featured in top 2 percent scientist of the world in 2021 for given by Published by Elsevier and authored by John P.A. Ioannidis et al.

"Dr. Madhu Agarwal", Khanal Foundation Research Excellence Award for for best flash presentation and poster in BSAEH, 2021 given by BSAEH
Welcome to Department of Chemistry

Department Login Faculty Login

# **Department by the Numbers**

14		
	Faculty	
568		
	Journal Publications	
222	Oanf Dublications	
40	Conf. Publications	
49	Research Projects	
31	researon rojecto	
31	PhD Awarded	

#### **Vision Statement**

To establish a world class academic and research centre by providing advance and latest knowledge of chemistry to impart outstanding education and research environment by creating smart classes and hi-tech laboratories. We strive to contribute to a chemically literate society through continuous pursuit of educational excellence and cutting-edge research in chemistry. Our vision is to continue industry and academia need based teaching programs to meet the current and future challenges by having educational excellence through imparting basic as well as advance knowledge of chemistry and related interdisciplinary areas.

### **Mission Statement**

The mission of the department is to produce students who have in depth understanding of chemistry, highly skilled having academically and technically sound knowledge to serve not only the needs of academic Institutions and Industries but also of the society at large. We are dedicated to rigorous standards for content knowledge, communication skills, research quality, and professional behavior. We wish to inculcate in them entrepreneurship ability and to develop innovative approach in academics and research spheres at par international standards by providing excellent teaching, learning and research environment. We are committed to demonstrating science as a collaborative human endeavor and as a way to understand the natural world. This will help to develop their holistic personality and enhance their sensitive towards welfare of potential with approach the the а society. We are on the path of excellence to create an environment that fosters discovery and collaboration amongst various streams of chemical sciences.

# **About the Department**

Welcome to the Department of Chemistry at Malaviya National Institute of Technology, Jaipur. Chemistry department was introduced, at Malaviya National Institute of Technology (then Malaviya Regional Engineering College), Jaipur, in 1963. This department offers 2-year M.Sc. Program. Department also offers full time and part time doctoral program in chemistry. Alumni of this department are at prestigious positions in india and abroad.

### Contact Information

Prof. Jyoti Joshi

Head, Department of Chemistry

Malaviya National Institute of Technology

JLN Marg, Jaipur-302017

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# People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

# **Faculty**

# **Head of Department**

Prof. Jyoti Joshi

**Professor** 

Ph.D.,M.Sc.,B.Sc.

Research Interests: Synthetic organic chemistry, Green Chemistry, Organo-metallic chemistry,

Electrochemistry, Water Treatment .

jjoshi.chy@mnit.ac.in 01412713550

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Google Scholar Profile

#### **Professor**

### **Prof. Ragini Gupta**

#### **Professor**

Ph.D.(Organic Chemistry), M.Sc. (Organic Chemistry), B.Sc.

**Research Interests**: Synthetic Organo-Fluorine Compounds, Some aspects of the Chemistry of Biologically Active Heterocyclic Compounds, Click Chemistry, Nano-chemistry, Green Chemistry, Biocatalysis, Phase Transfer Catalysis, Microwave Chemistry.

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### **Assistant Professor**

# Dr. Abbas Raja Naziruddin

# **Assistant Professor**

Ph.D.(Organometallic Chemistry), M.Sc.(Chemistry)

**Research Interests**: Functional Organometallic Chemistry, Inorganic-Photo Physics, Organometallics for Sustainable Energy and Biological applications, # Nanomaterials Chemistry for New Materials, Smart Materials and Nanoscale Composites, Energy Conservation and renewables, Hydrogen energy, Organometallic and Coordination Chemistry, Photo-voltaic Materials, Photcatalytic oxidation.

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Google Scholar Profile BibBase Profile Personal Website

#### Dr. Barun Jana

#### **Assistant Professor**

Ph.D.(Inorganic Chemistry), M.Sc.(Chemistry), B.Sc.(Chemistry(H))

**Research Interests**: Main Group Organometallic Chemistry, Catalysis and Reaction Mechanism, Supramolecular Chemistry - Synthesis and Applications, Small Molecule Activation, Environmental Chemistry.

barun.chy@mnit.ac.in View Detailed Profile Google Scholar Profile

# Dr. Biman Bandyopadhyay

### **Assistant Professor**

Ph.D.(Chemistry), M.Sc.(Chemistry), B.Sc.(Chemistry)

**Research Interests**: Atmospheric Chemistry, Hydrogen Bonding, Tautomerization, H Atom Transfer Reactions, Electronic Structure Calculation, Vibrational Spectroscopy, Computational Chemistry.

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Google Scholar Profile Personal Website

#### Dr. Manviri Rani

#### **Assistant Professor**

Ph.D.(Analytical Chemistry), M.Sc.(Organic Chemistry)

**Research Interests**: Analytical Chemistry, Environmental Chemistry, persistent organic pollutants,, Plastic polymers and associated chemicals, , Chromatographic analysis, Pesticide and Poly aromatic hydrocarbon analysis,, Solvent extraction, , Environment & Health, Nanochemistry; Green Chemistry: Green synthesis of nanomaterials and their application, , Environmental Nanotechnology, water and wastewater treatment, exploration of photocatalytic materials, , # Heterogeneous Catalysis for Environmental Applications and Green Technology, Advanced Separation Processes, Adsorption, Sensors for biomedical and environmental applications.

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#### Dr. Meena Nemiwal

# **Assistant Professor**

Ph.D.(Physical Chemistry), M.Sc. (Organic Chemistry), B.Sc. (Science)

**Research Interests**: Green Chemistry, Electrochemistry, electrocatalysis, Organic Synthesis, Nano Catalysis, # Nanoparticle Synthesis, Growth and Assembly, Nanochemistry; Green Chemistry: Green synthesis of nanomaterials and their application, .

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Google Scholar Profile ResearchGate Profile

#### Dr. Mukesh Jain

#### **Assistant Professor**

Ph.D.(Chemistry), M.Sc.(Chemistry), B.Sc.(Physics, Chemistry, Biology)

**Research Interests:** Heterocyclic chemistry, Synthetic Organic Chemistry, Electrochemistry.

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#### Dr. Pawan Rekha

## **Assistant Professor**

Ph.D.(Chemistry), M. Phil.(Chemistry), M.Sc.(Chemistry), B.Sc.(Medical Science)

**Research Interests**: Adsorption, Carbon Capture & Sequestration, Click Chemistry, Wastewater Treatment, Material synthesis, nanoporous materials, CO2 capture, homogeneous and heterogeneous catalysis.

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# Dr. Pradeep Kumar

## **Assistant Professor**

Ph.D.(Theoretical Chemistry), M.Sc.(Chemistry), B.Sc.(Science)

**Research Interests**: Quantum Confinement, Chemical kinetics and Dynamics, Atmospheric Chemistry, Electronic Structure.

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Google Scholar Profile Personal Website

# Dr. Raj Kumar Joshi

#### **Assistant Professor**

Ph.D.(Inorganic Chemistry), M.Sc.(Inorganic Chemistry), B.Sc.(Chemistry Hons)

**Research Interests**: Organo-catalysis, Metal Mediate organic transformation, Cluster chemistry of metalcarbonyls, Mixed metal cluster synthesis and their potential application in NLO and homogenous catalysis, Coordination chemistry of Scorpionate ligands and main group metals.

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## Dr. Sudhir Kashyap

## **Assistant Professor**

Ph.D.(Chemistry), M.Sc.(Organic Chemistry), B.Sc.(Chemistry, Biology)

**Research Interests**: Green Chemistry, Synthetic organic chemistry, Carbohydrate Chemistry, Medicinal Chemistry, Chemical Biology, Application of Iodate reagent, Glycochemistry, DOS of carbohydrate structures, Glycoconjugates synthesis.

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## Dr. Sumanta Kumar Meher

#### **Assistant Professor**

Ph.D.(Physical Chemistry), M. Phil.(Chemistry), M.Sc.(Chemistry), B.Sc.(Chemistry)

**Research Interests**: # Electrochemical Energy Conversion and Storage Systems, # Engineered Nanomaterials/Composites for Electrocatalysis, # Nanoscale Electrochemistry, # Nanomaterials Chemistry for New Materials, Smart Materials and Nanoscale Composites, # Nanoparticle Synthesis, Growth and Assembly, # Heterogeneous Catalysis for Environmental Applications and Green Technology, # Nanoscale

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# Dr. Sumit Kumar Sonkar Assistant Professor

Ph.D.(Chemistry), M.Sc.(Chemistry)

**Research Interests:** # Nanomaterials Chemistry for New Materials, Smart Materials and Nanoscale Composites, Carbon nanostructures, Composite Materials, Nano-chemistry.

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## Staff:

Dr. Deepak Kumar Technical Assistant (SG-II)

M.Sc., Ph.D.

**Expertise**: Chemistry

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M.Sc. M.Phil.

**Expertise**: Chemistry Vikassoni.chy@mnit.ac.in

Mr. Dayanand Sharma Senior Technician

B.Sc., Diploma in Computer **Expertise**: Chemistry, Computer

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Mr. Anshuman Kholia Technician

M.SC. (MNIT), CSIR - NET

**Expertise:** Chemistry

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Mr. Deepak Saini Work Assistant ITI, M.A.

**Expertise:** Electrical, Chemistry

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# Mr. Kamlesh Meena Office Attendant (SG-II)

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# Mr. Ganesh Narayan Meena Office Attendant

ganeshnarayan@mnit.ac.in

# **Facilities**

# Organic and Medicinal chemistry research lab

- 1. Rota vapour
- 2. Ultra-low Temperature bath
- 3. Ultrasonic machine
- 4. Centrifugal Machine
- 5. UV Chamber
- 6. Microwave oven

# **Organometallic and Catalysis**

- 1. Chiller
- 2. Rotary Evaporator
- 3. Fume hood
- 4. Centrifuge
- 5. High pressure reactor
- 6. Ultra sonicator

### **Nanomaterials**

- 1. UV-vis spectrophotometer, Jasco
- 2. Fluorescence spectrometer, Horiba

# **Molecular Spectroscopy Laboratory**

- 1. FTIR Spectrometer, Bruker Tensor II
- 2. Multipass long-path gas cell with heating jacket, Specac Cyclone C5
- 3. Workstation computer, Dell Precision 7920
- 4. Workstation computer, Tyrone Camarero
- 5. SS400TA-54

# **Carbohydrate Chemistry Research Laboratory**

- 1. Deep Freezer, Elanpro-20 degree EFS-340
- 2. Rotary evaporator, Chiller, Vacuum Pump, Heidolph
- 3. Magnetic Stirrers, iStir HP350 Neuation
- 4. Cryostat Circulating Chiller Bath, Metrex Scientific MSI,127
- 5. Diaphragm, Indian High
- 6. Vacuum Pump, IVP 75
- 7. Laboratory Refrigerator, 4-9 degree ECG-405
- 8. LaboratoryHeating Sonicator Bath, LMUC-9Sr L18421
- 9. Carousel 12 Plus Reaction Station, Radleys
- 10. Laboratory Melting Point Apparatus, 1206A/1/ISGW

11. Work-Station & Computational, HP/Dell

# **Inorganic Materials and Catalysis Laboratory (Est. July 2019)**

- 1. Rotary Evaporator with cryostat and pumps (Heidolph system)
- 2. Rotary Vane Pumps (PFEIFFER)
- 3. Solvent Distillation units (4)
- 4. Schlenk line systems for inert atmosphere reactions (3)
- 5. Argon Atmosphere Glove Box
- 6. Dye-Sensitized Solar Cell (DSSC) fabrication and Characterization facility
- 7. Computational workstations (DST) (Custom designed)
- 8. Dry-Ice Generation system
- 9. Preparative AM1.5G light source (Xenon system) for solar simulation Controlled temperature muffle furnace (Metrex Instruments)

# **Analytical Research Laboratory**

- 1. High performance liquid chromatography, Agilent 1108 series
- 2. Rotatory evaporator, Chemwin

# **Materials Electrochemistry and Energy Storage Laboratory**

- 1. Electrochemical workstation (7087E)
- 2. High temperature programmable tubular furnace (Ants Ceramics)

# Organometallic and Supramolecular Chemistry Laboratory (OMSCL)

- 1. Sonicator
- 2. Vacuum pump

# **Materials Chemistry and Catalysis Laboratory**

- 1. Hot air oven, Acumax
- 2. Digital ultrasonic cleaner, 5 Ltr, Labman
- 3. UV Cabinet complete set
- 4. Photochemical reactor, Blue LED source

#### **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

# Journal Publications (568)

### 2023

Jaidev Kaushik, Charu Sharma, Nicky Kumar Lamba, Purshotam Sharma, Gouri Sankar Das, Kumud Malika Tripathi, Raj Kumar Joshi, and Sumit Kumar Sonkar, "3D Porous MoS2-Decorated Reduced Graphene Oxide Aerogel as a Heterogeneous Catalyst for Reductive Transformation Reactions", Langmuir Volume: 1 / 1 / 2023

Akta Soni, Parveen Kumar, Vijesh Tomar, Raj Kumar Joshi, Meena Nemiwal, "A decade of synthesis of N-heterocyclic derivatives via magnetically retrievable Fe304@Si02@Cu(II) nanocatalysts: A review (2013-present)", Synthetic Communications Volume: 53 / 1469 / 2023

Akta Soni, Parveen Kumar, Vijesh Tomar, Raj Kumar Joshi, Meena Nemiwal, "A decade of synthesis of N-heterocyclic derivatives viamagnetically retrievable Fe304@Si02@Cu(II) nanocatalysts:A review (2013-present)", Synthetic communications Volume:00 / 2226271 / 2023 ISBN: 0039-7911

Aditi Soni, Yachana Upadhyay, Avinash K. Srivastava, Charu Sharma, Raj K. Joshi, "A facile synthesis of ferrocene functionalized vinyl ethers and their application as optical sensors for Cu2+ ions detection", Inorganica Chmica Acta Volume: 1 / / 2023

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Pawan Rekha	Acid base bifunctional nanoporous hybrid catalyst for chemical fixation of CO2	DST-SERB
2	Dr. Meena Nemiwal	Medicinal chemistry of natural products from selected Indian medicinal plants to discover potential anticancer agents (WOS-A project of Dr. Venu Sharma)	
3	Dr. Meena Nemiwal	Sustainable Solution for Toxic Metal Ion Pollutants in Water	Ministry of Housing an Urban Affairs
4	Dr. Meena Nemiwal	Greener approach for sensing and removal of noxious pollutants in mining wastewater	Rajasthan States Mine and Minerals Ltd.
5	Dr. Meena Nemiwal	Development of novel ferrocene-based metal organic frameworks (MOFs) as heterogeneous catalysts for sustainable organic transformations	MoE-MHRD
6	Dr. Sumit Kumar Sonkar	Extracting the Value-added Nanoparticles from Metal-based Waste Materials for Catalyzing Organic Transformation Reactions	SERB-DST
7	Dr. Sudhir Kashyap	Stereoselective Synthesis of Rare-Sugars and Unnatural Glycoconjugates Comprising 2-Deoxy and 6-Deoxy Saccharides	DST-SERB
8	Dr. Sandeep Chaudhary (On Lien)	Exploring the immunomodulatory activities of novel Toll-like receptor- signaling inhibitors in peripheral blood mononuclear cells from lupus patients- A study to identify TLRs as drug targets for lupus	Core Research Grant SERB New Delhi
9	Dr. Biman Bandyopadhyay	Mechanistic and energetic aspects of fast heterogeneous atmospheric reactions on water and ice surfaces, A low temperature IR spectroscopic investigation	SERB-DST, Govt. of In

#	Project Investigator	Title of the project	Funding Agency
10	Dr. Pradeep Kumar	The fate of nitrous oxide in the atmosphere A computational study	DST-SERB

P Janjani, U Bhardwaj, R Gupta, HS Kushwaha, "A Non-Enzymatic Electrochemical Sensor for Glyphosate Adopting Surface Modified Screen-Printed Electrodes", ACS Applied Engineering Materials Volume:1(1) / 359�368 / 2023

Devanand Roy, Parveen Kumar, Akta Soni, Meena Nemiwal, "A versatile and microporous Zn-based MOFs as a recyclable and sustainable heterogeneous catalyst for various organic transformations: A review (2015-present)", Tetrahedron Volume: 1 / 133408 / 2023 ISBN: 0040-4020

# **Projects**

- Research Projects
- Testing & Consultancy Projects

# **Research Projects**

**Event Organized** 

International Conference on International Conference on Recent Innovations in Cleaner Technologies (8th-9th March, 2021) at Malaviya National Institute of Technology, Jaipur, Jaipur, India from 08-03-2021 to 09-03-2021

National Workshop on **12 days Faculty development Program on The Challenges in Strengthening the Clean Technology Entrepreneurship** at Malaviya National Institute of Technology, Jaipur, India from 25-01-2021 to 05-02-2021

International Conference on **Frontiers in Organometalics and Catalysis** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 20-01-2021 to 22-01-2021

National Short Term Course on **Spectroscopic Techniques for Materials Characterization** at online, online from 04-01-2021 to 08-01-2021

National Short Term Course on **Advanced Nanostructured Materials for Sustainable Energy and Environmental Remediation-Tiny Particles, Big Effects** at MNIT Jaipur, Jaipur, India from 18-12-2020 to 22-12-2020

National Seminar on Talk on "Intellectual Property Awareness and Literacy‮ under KAPILA (Kalam Program for Intellectual Property Literacy and Awareness), IIC and MIIC at Malaviya National Institute of Technology, Jaipur, India from 27-11-2020 to 27-11-2020

International Short Term Course on **Nanomaterials for Environmental Applications: Characterization by Analytical Tools** at MNIT Jaipur, Jaipur, India from 17-11-2020 to 21-11-2020

National Short Term Course on **Density Functional Theory & its applications using Gaussian Software** at MNIT, JAIPUR (JAIPUR), India from 24-02-2020 to 28-02-2020

National Workshop on **Matribhasha Diwas** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 21-02-2020 to 21-02-2020

National Workshop on **Theory & Practice of Characterization and analytical techniques** at MNIT, JAIPUR (JAIPUR), India from 18-12-2019 to 22-12-2019

# **Welcome to Department of Civil Engineering**

# **Department by the Numbers**

37	
	Faculty
785	
	Journal Publications
800	
	Conf. Publications
74	
	Research Projects
227	
	PhD Awarded

# **About the Department**

Welcome to the Department of Civil Engineering at Malaviya National Institute of Technology, Jaipur. Civil engineering discipline was introduced, at Malaviya National Institute of Technology (then Malaviya Regional Engineering College), Jaipur, in 1965. At the beginning world class laboratories, especially material testing, hydraulics, survey, road material testing, and soil testing laboratories were developed. Later the department was split into two separate departments of Civil Engineering and Structural Engineering. The department offers a four year course leading to the Bachelor's Degree in Civil Engineering with a student intake of 93. It also offers three full time and part time postgraduate courses in Water Resources Engineering, Environmental Engineering and Transportation

Engineering.

Majority of the graduates are well placed in India and abroad. Many of them have also gone for higher studies in the country and abroad. Right from its inception, the Department has been doing its best to bring about excellence in academics.

its best to bring about excellence in academics. The department is equipped with latest facilities and equipments for extensive training to both the undergraduate and postgraduate students. In addition to that these are also used for numerous research, consultancy and testing works.

#### **Vision Statement**

To serve the nation by providing high quality engineering education that enables students to get a profession that can improve the civil infrastructure and social welfare.

### **Mission Statement**

To create enabling environment for excellent teaching, learning and research in order to produce leading entrepreneurs and innovators in the field of civil engineering for sustainable development.

# **Contact Information**

# **Prof. Mahender Choudhary**

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# People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

# **Faculty**

# **Head of Department**

# **Prof. Mahender Choudhary**

### **Professor**

Ph.D.,M.E.,B.E.

**Research Interests :** Water Resource Engineering, Artificial Groundwater Recharging, Seepage and

Drainage, Hydrological Modelling, Climate Change Impacts and Adaptation.

mahender@mnit.ac.in 01412713377

View Detailed Profile

### **Professor-HAG**

# Prof. Akhilendra Bhushan Gupta

#### **Professor-HAG**

Ph.D.(Environmental Science and Engg), M. Tech. (Enviro Sc and Engg), B.E. (Civil Engineering)

Research Interests: Environmental Engg., Environment & Health, Biological Waste Treatment, Env.

Modeling, Bioprocess Engineering, Wastewater Treatment.

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View Detailed Profile

Google Scholar Profile

### Prof. B. L. Swami

### **Professor-HAG**

Ph.D.(Transportation (Civil Engg)), M.E.(Transportation (Civil Engg)), B.E.(Civil Engineering)

**Research Interests :** Tansportation Engineering.

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Google Scholar Profile

### **Prof. Gunwant Sharma**

### **Professor-HAG**

Ph.D.(Civil Engineering), M. Tech. (Water Resources Engineering), B.E.

Research Interests: Water Resource Engineering, Remote Sensing.

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# Prof. M. K. Shrimali

### **Professor-HAG**

Ph.D.(Earthquake Engg/Structural Eng), M.Tech.(Civil Engineering), B.E.(Civil Engineering)

**Research Interests:** Research Interest Includes Earthquake Resistance Design, Seismic Control Methods And Design Of RC And Steel Structures.

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Prof. R. C. Gupta Professor-HAG

Ph.D.(Engineering), M.E.(Structural Engineering), B.E.(Civil Engineering)

**Research Interests:** Concrete Technology. rcqupta.ce@mnit.ac.in 01412713271

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Prof. Ravindra Nagar

**Professor-HAG** 

Ph.D.( Tall Buildings), M.Tech.(Structural Engineering), B.E.(Civil Engineering) **Research Interests:** Artificial Intelligence, Tall Buildings, Building materials.

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**Prof. Rohit Goyal** 

**Professor-HAG** 

Ph.D.(Civil Engineering), M.E.((Hons.) Hyd. and Irr. Engg.), B.E.((Hons.) Civil Engineering)

Research Interests: Water Resource Engineering, Remote Sensing, GIS, Groundwater Modeling.

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**Prof. Sudhir Kumar** 

**Professor-HAG** 

Ph.D.(ENVIRONMENTAL ENGG), M.E.(Env. Engg), B.E.(Civil)

Research Interests: Environmental Engg., Wastewater Treatment, SUSTAINABLE DEVELOPMENT.

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Google Scholar Profile

# Prof. YOGESH PRAKASH MATHUR

**Professor-HAG** 

Ph.D.(Civil Engineering), M.E.(Environmental Engineering), B.E.(Civil Engineering)

**Research Interests**: Water Resource Engineering, Environmental Engg., Optimizations & Systems Applications, Biological Waste Treatment, Climate change impact assessment, Computational Fluid Dynamics (CFD), Computer Applications, Concrete Roads with waste and hazardous materials, Environmental Planning, Environmental Impact Assessment, Evolutionary Computing, Nature Inspired Algorithms, Nature Inspired Optimization, Operation Research, System analysis, Urban design, environment, Wastewater Treatment.

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**Professor** 

Prof. Ajay Singh Jethoo

**Professor** 

Ph.D.,M.E.(Water Resources),B.E.(Civil Engineering)

**Research Interests:** Water Resource Engineering, Urban Water Systems and Integrated Urban Water Management.

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### **Prof. Ashok Kumar Vyas**

### **Professor**

Ph.D.(Civil Engg.), M.E.(Building Sc & Technology), B.Tech.(Civil Engg)

**Research Interests**: Building Technology, Use of waste in construction sector.

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#### **Professor**

Ph.D.(Integrated Water Management ), M.E. (Water Resources), B.E. (Civil Engineering)

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#### Prof. S. D. Bharti

#### Professor

Ph.D.(Earthquake Engineering), M.Tech. (Structural Engineering), B.E. (Civil Engineering)

**Research Interests**: Earthquake Engineering, Structural Control Methods, Rehabilitation and Retrofitting of Structures, Earthquake Resistant Design of Steel Structures.

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## **Prof. Sanjay Mathur**

### **Professor**

Ph.D.(Civil Engineering), M.E.(Environmental Engineering), B.E.(Civil Engineering)

**Research Interests**: Environmentally Sustainable Buildings, Energy efficiency in buildings, Water efficiency in buildings, Thermal comfort in buildings, Environmental Impact Assessment, Wastewater Treatment, Water Treatment.

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# **Prof. Suresh Kumar Tiwari**

#### **Professor**

Ph.D.(Geotechnical Engineering), M.Tech.(Geotechnical Engineering), B.E.(Civil Engineering)

**Research Interests**: Ground Improvement Technologies, Soil Reinforcement Techniques, Geosynthetics and reinforced soil structures, Environmental Geotechnology, Fibers in geotechnical engineering, Use of waste materials for soil stabilization.

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# Prof. Urmila Brighu

#### **Professor**

Ph.D.,M.Tech.(Environmental Engg.),B.E.(Civil Engg.)

**Research Interests:** Environmental Engg., Water and Wastewater Treatment, Wastewater Treatment, Water Treatment, Management in WATSAN Sector.

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#### **Associate Professor**

#### Dr. Arun Gaur

#### **Associate Professor**

Ph.D.(Transportation), M.Tech.(Transportation), B.E.(Civil)

**Research Interests:** Tansportation Engineering, Waste material with Bitumen for Roads, Cold Mix Mixes with foam bitumen and emulsion, Intelligent Transportation Systems, Material reuse/recycle opprtunities, Traffic Engineering and Transportation Planning, Concrete Roads with waste and hazardous materials, Utilization of solid waste materials for road construction.

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#### Dr. Jinendra Kumar Jain

# **Associate Professor**

Ph.D.(CIVIL ENGG-TRANSPORTATION ENGG), M.E.(TRANSPORTATION ENGINEERING), B.E.(CIVIL ENGINEERING)

**Research Interests :** Traffic Engineering and Transportation Planning, Urban Transportation Planning, Sustainable Transportation Systems, Sustainable matrerials.

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# Dr. Nivedita Kaul

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Ph.D.,M.Tech.,B.E.

**Research Interests**: Environmental Engg., Indoor and Outdoor Air Pollution, Solid waste management, Noise pollution, Climate change impact assessment.

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#### Dr. Pawan Kalla

### **Associate Professor**

Ph.D.(Civil Engineering), M.E.(Tranportation), B.E.(Civil Engineering)

**Research Interests**: Material Investigations (Road Material), Rural Roads (Low Cost Materials), Material Properties and Pavement design parameters.

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# Dr. Rajesh Gupta

### **Associate Professor**

Ph.D.(Civil Engineering), M.E.(CAD), B.E.(Civil Engineering)

**Research Interests**: Computer Aided Design, Concrete Technology, Structural analysis and design of steel and concrete structures.

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### Dr. Sumit Khandelwal

### **Associate Professor**

Ph.D.(Remote Sensing & GIS App.), M. Tech. (Water Resources Engineering), B.E. (Civil Engineering)

Research Interests: Remote Sensing, GIS, Building Technology.

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### Dr. Vinay Agrawal

### **Associate Professor**

Ph.D.(Structural Engineering), M.E.(CAD in Structural Engineering), M.E.(Water Resources Engineering), B.E.(Civil Engg(GOLD MEDALIST))

**Research Interests:** Artificial Intelligence, Structural analysis and design of steel and concrete structures, Concrete Technology.

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# **Assistant Professor**

### Dr. Amit Kumar

# **Assistant Professor**

Ph.D.(Civil Engineering), M.Tech.(Environmental Engg & Mgmt), MSE(Environmental Engineering), B.E.(Civil Engineering)

**Research Interests**: Biological Waste Treatment, Environmental Engg., Environmental Geotechnology, Solid Waste Management, Material Flow Analysis, Risk Assessment.

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### Dr. Anoop I. Shirkol

#### **Assistant Professor**

Ph.D.(Structural Engineering), M. Tech. (Structural Engineering), B.E. (Civil Engineering)

**Research Interests**: Structural Analyses: Static, Free Vibration, Buckling and Dynamic Stability Analysis, Structural Engineering and Dynamics.

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# Dr. Dhiraj Raj

### **Assistant Professor**

Ph.D.(Earthquake Engineering), M.Tech.(Earthquake Engineering), B.Tech.(Civil Engineering)

**Research Interests**: Earthquake Engineering, Earthquake resistant Buildings and Construction Practices, Performance-Based Design of Structures, Seismic Vulnerability and Risk Evaluation of Structures, Geotechnical Earthquake Engineering, Soil Structure Interaction, Finite Element Analysis.

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#### Dr. Himanshu Arora

### **Assistant Professor**

Ph.D.(Civil Engineering (Hydraulics)), M. Tech. (Water Resources Development & Management), B.E.(Civil Engineering)

**Research Interests**: Water Resource Engineering, Regional Groundwater Modelling, Planning of Groundwater Development, GIS, Optimization, Climate change impact assessment, Linked Simulation Optimization, Physical modeling and analysis in Water resources.

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# Dr. Manoj Kumar Diwakar

### **Assistant Professor**

Ph.D.(Hydraulics & Water Res. Engg.),M.Tech.(Hydraulics & Water Res. Engg.),B.E.(Civil Engineering)

Research Interests: Computational Fluid Dynamics (CFD), Meshfree Method, Modelling And Simulation,
Numerical Modelling, Water Resource Engineering.

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### Dr. Neha Shrivastava

#### **Assistant Professor**

Ph.D.(Geotechnical Engineering), M.Tech.(Geotechnical Engineering), B.Tech.(With Honours Civil Engineering)

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### Dr. P V Ramana

### **Assistant Professor**

Ph.D.(Structural Engineering), M. Tech.(Structural Engineering), B. Tech.(Civil Engineering)

**Research Interests:** Novel Separation Techniques, Nonlianer Mathematical Models, Computational method for linear/non-linear problems, Analysis & design of laminate plates, Numerical evaluation and error

estimation, Structural analysis and design of steel and concrete structures, Mathematical models for structural health monitoring system, Structural Engineering and Dynamics , Novel Techniques for NEW MATERIAL invention .

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### Dr. Rameshwar J. Vishwakarma

# **Assistant Professor**

Ph.D.(Structural Engineering), M. Tech.(Structural Engineering), B.E.(Civil Engineering)

Research Interests: Concrete Pavement, Structural Engineering, Material Testing, Structural Instrumentation.

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### Dr. Ruchi Sharma

## **Assistant Professor**

Ph.D.(Environmental Engineering), M.Tech.(Environmental Science & Engg.), B.Tech.(Civil Engineering)

Research Interests: Machine learning application, Environmental Engg., Environmental Chemistry,

Environment & Health, Env. Modeling, Computational Fluid Dynamics (CFD), Computer programming, Indoor

Air Quality, Human Health Risk Assessment, Ambient Air Quality, Source Apportionment of Particulate

Matter, Statistical Modeling & Uncertainty Analysis, Data-driven Modeling.

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### Dr. Sandeep Shrivastava

#### **Assistant Professor**

Ph.D.(Construction), M.Tech.(Envt. Engg and Mgmt.), B.Tech.(Civil Engineering)

Research Interests: Sustainable Material and Construction, Construction and Demolition waste, Life Cycle and Sustainability in Costruction, Waste/Byproduct Application in Construction, Waste to resource valorization, Sustainable/Eco-friendly materials, technology and practices, Sustainability engineering, Sustainable Built Environment, Sustainable and circular construction, Building Information Modeling/Construction Information System, LCA application in construction, Environmentally Sustainable Buildings, Environmental Product Declarations.

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# Dr. Sanyam Dangayach

## **Assistant Professor**

Ph.D.(IIT Bombay), M.Sc. (University of Texas at Austin), B. Tech. (IIT Kanpur)

**Research Interests:** Geotechnical and Geoenvironmental Engineering, Sediments bearing gas hydrates, Remediation of ground water contamination, Valorization of mine tailings and industrial byproducts, Cold region geomechanics, Heat migration in sediments.

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#### Dr. Siddharth Mehndiratta

#### **Assistant Professor**

Ph.D.(Geotechnical Engineering), M. Tech. (Geotechnical Engineering)

**Research Interests:** Geotechnical Engineering, Numerical Modelling, Unsaturated Soil Mechnaics.

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### **Adjunct Faculty**

# Prof. Biswajeet Pradhan

# **Adjunct Faculty**

Ph.D.(--),M. Tech.(--),M.Sc.(--),B.Sc.((Hons.) with Distinction)

### Research Interests:.

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Mr. Rajveer Dotasara
Junior Assistant
Graduation from Shekhwati University, Sikar
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Mr. Ramji Lal Meena Supporting Staff

**Facilities** 

Major facilities available in Civil Engineering Department

# **Computer Lab**

Server, 25 High End Pentium IV Desktops, Laptop and Desktop to every Faculty Member, Color and A3 size Laser Printer, Plotter, Scanner, Office Suites, OS, Programming Tools and Software.

# **Environmental Engg. /Public Health Engg. Lab**

Ion Analyzer with ion selective electrode, UV-Visible Spectrophotometer, Atomic Absorption Spectrophotometer, Ozone Generator, Auto Exhaust Analyzer, Particle size analyzer, Toxic gas analyzer, High volume sampler Diesel Smoke Meter, Noise Meter, Potable lab for complete physical and chemical analysis of water & waste water.

**TOC** analyzer

Incubator

**Conductivity Meter** 

# **Survey Lab**

Build Auto Reduction, Digital Planimeter, Total Station, Self Reduction Theodolite, Electronic Distance Measuring Instrument, GPS.

# **Road Material Testing Lab**

Nuclear Density Gauge, CBR Apparatus, Digital Benkelmen Beam, Core Cutter, Marshall Apparatus, Roughometer, Bump Integrator & Viscometers.

# **Hydraulics Lab**

DISA Hot Wire Anemometer, Wind Tunnel, Rigid and Tilting Bed Flumes, Francis Turbine, Pelton Wheel Turbine, Centrifugal Pump, Kaplan Turbine.

# Remote Sensing/GIS Lab

Digital Camera, Mapping Software such as ArcGIS University Education Kit with extensions, GeoMedia Professional, GRID, ERMapper, AutoCAD Educational Solution Set (Civil Engineering), Groundwater Modelling System (GMS), Watershed Modelling System (WMS).

# **Geology Lab**

Clinometer, Microscope, Hardness Box, Samples of Rocks.

### Soil Lab

Soil Drilling, Sampling & SPT Machine, Direct Shear Box test apparatus 2 kN, Triaxial test, Un-Confined compressive strength, Static cone penetrometer 100 kN capacity Engine Driven, Plate load test, Direct Shear Box test setup for rocks, Vane Shear Test Setup.

**Automatic Consolidometer** 

**Compression Test Apparatus** 

**Direct Shear Test Apparatus** 

**Field Vane Shear Test** 

Large Scale Settlement Test Apparatus

**Slake Durability Test Apparatus** 

**Triaxial Test** 

**Unconfined Compression Test Equipment** 

### **Concrete Lab**

The laboratory is one of the largest laboratories for evaluation of concrete durability and is also equipped with a 42 m long Gantry Girder with a 7.8 m span for shifting heavy equipments/specimens. Some of the important equipments are ????Electronic Universal Testing Machine, Rebound Hammer, Digital Compressive Testing Machine, Ultra-sonic Pulse Velocity Apparatus, Concrete Core Cutter, Carbonation Chamber, Autoclave Machine, Abrasion Testing Machine, Water Permeability Apparatus (DIN 1048), Autoclam

Permeability System, Freeze-thaw Chamber, Salt Spray Chamber, Chloride Ion Diffusion Set-up, Corrosion Monitoring System, Vacuum Impregnation Machine, and Temperature controlled curing tanks.

# **Structural Dynamics Lab**

The Lab has an electrodynamics shaker of 600 kg(f) pay load capacity and maximum acceleration up to 75g, and a frequency range of 1 to 3500Hz, with microprocessor controlled data acquisition (accelerometers, having frequency range of 1Hz to 6kHz, having nominal sensitivity of 10 to 30 pC/g) and control system. Besides that the Lab has two horizontal and one vertical electromechanical shaker, vibration absorber and various size building models meant for imparting fundamental understanding of concepts of structural dynamics.

# **Material Testing Laboratory/ Structural Analysis Laboratory**

Major	equipment in	the	Material	Testing	Laboratory	/	Structural	Analysis	Laboratory:
1.		Fa	atigue		Te	stin	ıg		Machine
2.		Unsyı	mmetrical		Ве	end	ing		Apparatus
3.				Searle's	S				Apparatus
4.		Co	lumn		Buck	ding	g		Apparatus
5.		Cer	ntrifugal		F	orc	e		Apparatus
6.		Si	mply		Sup	оро	rted		Beam
7.		Har	dness		Tes	tin	g		Equipment
8.		Thr	ee-Hinged			Arc	:h		Apparatus
9.	Maxw	ell		Reciproc	al		Theorem		Apparatus
10.		Cı	urved		Men	nbe	r		Apparatus
11.	Carry		Over		Factor		Beam		Apparatus
12.		I	mpact		To	est			Apparatus
13.		Tv	vo-Hinged			Arc	:h		Apparatus
14.	De	eflection	on	0	f		Truss		Apparatus
15. Red	dundant Joint A	ppara	tus						

**Brinell Hardness Test Apparatus** 

**Curved Member Apparatus** 

**Deflection of Truss Apparatus** 

**Fatigue Testing Machine** 

**Material Testing Machine** 

**Redundant Joint Apparatus** 

**Simply Supported Beam Apparatus** 

**Three Hinges Arch Apparatus** 

**Universal Testing Machine** 

**Vickers Hardness Test Apparatus** 

White Deflected Beam Apparatus Publications

- Journal Publications
- Conference Publications
- Book/Chapter Publications

**Journal Publications (785)** 

### 2023

Engammagari Ganesh, P.V. Ramana, M.K. Shrimali, "**3D wave problems evaluation and forecasting through an innovative technique**", Materials Today: Proceedings Volume: 72 / 1175-1180 / 2023 ISBN: 2214-7853

Gyanesh Gupta, Sanjay Mathur, Jyotirmay Mathur, Bibhu Kalyan Nayak, "Blending of energy benchmarks models for residential buildings", Energy and Built environment Volume :292 / / 2023

Gyanesh Gupta, Sanjay Mathur, Jyotirmay Mathur, Bibhu Kalyan Nayak, "Comparison of energy-efficiency benchmarking methodologies for residential buildings", Energy and Built environment Volume: 285 / 2023

Jeetendra Singh Khichad, Rameshwar J. Vishwakarma, and Sushilkumar B Magade, "Comparison of stresses in jointed plain concrete pavement without shoulder", Materials Today: Proceedings Volume:77 / 764-772 / 2023

Mohammed Rihan Maaze, Sandeep Shrivastava, "Design development of sustainable brick-waste geopolymer brick using full factorial design methodology", Construction and Building Materials Volume: 370 / 130655 / 2023

Siddharth Mehndiratta, Deepak Kumar Singh, Vishwas A. Sawant and Gaurav Tiwari, "Development of Uncoupled and Coupled Approaches to Analysing the Response of Foundations Resting over

Partially Saturated Soil: Mathematical Development and Comparisons", Indian Geotechnical Journal Volume: 52 / / 2023

S. Narayan, M.K. Shrimali, S.D. Bharti , T.K. Datta , "Effects of aftershocks on the performance of steel building frames" , Structures Volume :56 / 1 Projects

Title of the project

**Funding Agency** 

- Research Projects
- Testing & Consultancy Projects

# Research Projects

**Project** 

#	Investigator	Title of the project	Funding Agency
1	Prof. Rohit Goyal	Transforming Aandhi village in Rajasthan towards a Zero waste Model through Green technology Interventions	Department of Science and Technology, New Delhi
2	Dr. Amit Kumar	Resource recovery from municipal solid waste in Sujangarh municipality	Department of Local Bodies, Rajasthan
3	Dr. Amit Kumar	Community based Managed Aquifer recharge (CoMAR) in rural cluster - A tool for sustainable and safe drinking water supply	Jal Jeevan Mission
4	Prof. Urmila Brighu	Development of integrated treatment scheme for RO reject management	WSSO, Jaipur
5	Dr. Pawan Kalla	Gainful Utilization of Mining Stone Waste in Rajasthan (26-12-11 onwards)	CDOS) Center for Development Stones (Jaipur, Rajasthan)
6	Prof. Mahesh Kumar Jat	Development of Seismic Risk Index for 60 Indian Cities	NDMA
7	Prof. Suresh Kumar Tiwari	NDT test of 16 no. headwork structures at PHED – Bhiwadi site.	Susil Ku. Gantayat Sr. Manage (Projects) WPIL – SMS JV
8	Prof. Suresh Kumar Tiwari	Mix design for work of Bisalpur Jaipur Water supply project stage II (Phase 1)	The IHP Co. Ltd. & GCKC JV
9	Prof. Suresh Kumar Tiwari	Consultancy for Proof checking of Design and drawings, Mix Design, Bar Test, Cube Tes	M/s Arjun Lal Thekedar
10	Dr. Amit Kumar	Protecting Public Health with Novel Microbial Indicators to Monitor the Performance of Water Reuse Systems in India	U.S Department of state

**Patents** 

"Novel Support and Loading System for Bending test of Bamboo: Enhancing stability and Adjustability", Arun Gaur, Amit Sain, Jagdish Lohar and Prakash Somani, Reg.No. 202311046078 [The Patent Office, Government of India] Dt.24-07-2023

Monitor the Performance of Water Reuse Systems in India

"A method for utilization of Shale aggregates in subbase layer for flexible pavement.", Arun Gaur, Amit Sain, Dipankar Sarkar, Rajat Mangalmurti Ninawe., Reg.No. 202311033395 [The Patent Office, Govt. of India] Dt.11-05-2023

"A COMPOSITION OF CONCRETE PAVEMENT AND THE METHOD FOR PREPARATION THEREOF", Arun Gaur, Prakash Somani, Pankaj Dhemla, Akash Kumar, Reg.No. 202311014872 [The Paatent office, Govt. of India] Dt.06-03-2023

"SUSTAINABLE CONCRETE COMPOSITION AND METHOD FORPREPARATION THEREOF", Arun Gaur, Sonal Saluja, Sanjay Mundra, Reg.No. IN 202211044873 [The Patent office, Government of India]

Dt.05-08-2022

"EXPERIMENTAL INVESTIGATION IN SINTERED LIGHT WEIGHT AGGREGATE CONCRETE BY PARTIAL REPLACEMENT OF RIVER SAND WITH WASTE MARBLE SAND", Pankaj dhemla, Prakash Somani, B.L. Swami, P.N. Dadhich, Mansha Swami, Reg.No. 202111060486 [Intellectual Property of India]

Dt.24-12-2021

"REFRACTORY CASTABLE BASED STABLE SANDY SOIL COMPOSITION AND METHOD OF PREPARATION THEREOF", Sanchit Anand, Dr. Arun Gaur, Medhavi Gupta, Manash Pratim Deori, Reg.No. 202111045593 [The Patent Office, Govt. of India] Dt.26-11-2021

"HIGH STRENGTH CEMENT CONCRETE INCORPORATING DISCARDED TIRE RUBBER ASH AS A PARTIAL REPLACEMENT FOR BINDER, ENSURING SUSTAINABILITY IN CONSTRUCTION INDUSTRY", Thomas, Blessrn Skariah; Yang, Jian; Gupta, Ramesh Chandra and Kumar, Sathish, Reg.No. 2020102116 [The Patent Office, Commonwealth of Australia, Australian Government, Australia]

Dt.30-09-2020

"SUSTAINABLE CEMENT CONCRETE COMPOSITE", Dr. Blessrn Skariah Thomas, Dr. Ramesh Chandra Gupta, Dr. Jian Yang, Dr. Priyansha Mehra, Er. Prarthitha Basu, Dr. Vasudev R. and Er. Jerison Scariah James, Reg.No. 374296 [The Patent Office, IPO Building, New Delhi, India]

# **Event Organized**

International Conference on **Creative and Innovative solutions in Civil Engineering** at Malaviya National Institute of Technology, Jaipur, India from 11-08-2023 to 12-08-2023

National Short Term Course on **Road Safety Audit for Highway Engineers** at Malaviya National Institute of Technology, JAIPUR, India from 10-03-2023 to 24-03-2023

National Seminar on Expert lecture on "Role of geosynthetics in sustainable infrastructure development" at MNIT Jaipur, Jaipur, India from 20-12-2022 to 20-12-2022

International Conference on **12th Structural Engineering Convention-An International Conference (12th SEC 2022)** at MNIT Jaipur, Jaipur, India from 19-12-2022 to 22-12-2022

National Short Term Course on "Road Infrastructure Planning & construction at Malaviya National Institte of Technology, JAIPUR, India from 04-08-2022 to 06-08-2022

National Short Term Course on **Road Safety Training Program** at Malaviya National Institute of Technology, JAIPUR, India from 28-05-2022 to 11-06-2022

National Seminar on **StartUp Talks at MNIT Jaipur** at MNIT Jaipur, Jaipur, India from 14-12-2021 to 15-12-2021

National Short Term Course on **Planning and Monitoring of Watershed Development Using Geospatial Techniques** at MNIT, Jaipur, India from 03-12-2021 to 08-12-2021

International Short Term Course on **15 days Road safety auditors certification course** at MNIT, Jaipur, India from 24-04-2021 to 08-05-2021

National Seminar on **Innovation and Entrepreneurship in Environmental Engineering** at MNIT, Jaipur, India from 23-03-2021 to 23-03-2021

International Conference on 'Transportation Geotechnics towards Sustainability' sponsored by Shastri Indo-Canadian Institute (SICI) at MNIT, Awards & Honours

"Dr. Sandeep Shrivastava", Best Paper Award for the paper entitled Leaching Behaviour of Recycled Concrete Aggregates and Pervi for given by 4th International Conference on 'Trends & Recent Advances in Civil Engineering' Amity University

"Dr. Dhiraj Raj", Young Geotechnical Engineer Award for Best Paper on given by Indian Geotechnical Society - Soiltech India Pvt. Ltd., Pune

"Dr. Rameshwar J. Vishwakarma", Best paper award for research paper at International Conference (ICSTEESD-20) given by GHRCE

"Dr. Dhiraj Raj", IGS-Prof. G.A. Leonards Annual Award for Best Ph.D. Thesis in "Geotechnical Engineering given by Indian Geotechnical Society

"Dr. Dhiraj Raj", Excellence in Doctoral Research Award for Best Ph.D. Thesis at IIT Roorkee given by IIT Roorkee Received from Honorable President of India (Sri Ramnath Kovind)

"Dr. Dhiraj Raj", Young Geotechnical Engineer Award for Best Paper on given by Indian Geotechnical Society - Soiltech India Pvt. Ltd., Pune

"Dr. Siddharth Mehndiratta", Best Paper for given by B.R. Ambedkar National Institute of Technology Jalandhar

"Dr. Rameshwar J. Vishwakarma", Second poition in poster presentation for presenting poster on research scholars day given by VNIT, Nagpur

"Dr. Amit Kumar", IconSWM 2016 Excellent Paper Award for 6th Icon SWM Conference given by Jadavpur University, Kolkata

"Dr. Himanshu Arora", International Travel Support - Science and Engineering Research Board (ITS-SERB) for attending International conference abroad (organized by AGU) at San-Francisco, USA given by Department of Science and Technology (DST), Science and Engineering Research Board (ITS-SERB)

"Dr. Amit Kumar", ISWA Austria Scholarship for Summer School for ISWA given by Technische Universität Wien, Vienna, Austria

"Dr. Amit Kumar", National Post-Doctoral Fellowship for Post Doc given by SERB Government of India

**Welcome to Department of Computer Science & Engineering** 

**Department by the Numbers** 

25

412	Journal Publications
622	Conf. Publications
48	Research Projects
93	PhD Awarded

# **About the Department**

Department of Computer Science & Engineering came into existence in 1994. The first degree program offered by the Department was B.E. (Computer Engineering) in affiliation with the University of Rajasthan. The first batch graduated in 1998. Another degree programme B.E. (Information Technology) was initiated in 2001. In January 2004, first admissions to Ph.D. programme took place. In 2008, M.Tech. (Computer Science & Engineering) programme was initiated whereas, M.Tech. (Computer Science & Information Security) was started in 2016. At present, Computer Science & Engineering Department is offering following degree programmes: B.Tech (Artificial Intelligence & Data Engineering) B.Tech. Science (Computer & Engineering) M.Tech. & ( Computer Science Engineering) M.Tech. (Computer Science & Information Security) Ph.D.

Faculty at Computer Science & Engineering believes in open interaction with students who are encouraged to participate in academic, research and extra-curricular activities. Students have never misplaced trust put in them by department and have done well in academic and industry alike.

### **Vision**

To be a Centre of Excellence in Computer Science and Engineering domain and work with industry on cutting edge technology to address current and emerging challenges in global perspective for the development of society.

# Mission

To impart quality engineering education, enhance problem solving skills, foster research and innovation, encourage entrepreneurship and mold students of integrity and ethics to provide leadership with social sensitivity for the betterment of the country and humanity as a whole.

#### Contact Information

### Dr. Namita Mittal

Head, Department of Computer Science & Engineering
Malaviya National Institute of Technology

JLN Marg, Jaipur-302017

0141-2713340

hod.cse@mnit.ac.in

# People

- Faculty
- Staff
- Research Scholars
- · PhD Awarded

# **Faculty**

# **Head of Department**

#### Dr. Namita Mittal

**Associate Professor** 

Ph.D.(Computer Engineering), M. Tech.(Data Science and Engineering)

**Research Interests:** Information Retrieval, Data Mining, Natural Language Processing, Machine Learning, Data Science.

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View Detailed Profile

Google Scholar Profile

Personal Website

#### **Professor-HAG**

# **Prof. Mahesh Chandra Govil (On Deputation)**

# **Professor-HAG**

Ph.D.(Computer Science & Technology), M.Tech.(Computer Science & Technology), B.E.(Electrical Engineering)

**Research Interests**: Real Time Systems, Parallel & Distributed Systems, Fault Tolerant Systems, Cloud Computing.

govilmc@yahoo.com 01412713418

View Detailed Profile

# **Prof. Manoj Singh Gaur (On Deputation)**

**Professor-HAG** 

Ph.D.,M.E.(CSE),B.E.(ECE)

**Research Interests:** Network Security, Embedded Systems, Information Security, Computer Networks, Multi-Core And Cloud Computing.

gaurms@gmail.com 911412713227

View Detailed Profile

#### **Professor**

### Prof. Girdhari Singh

**Professor** 

Ph.D.(Computer Engineering), B.E.(Computer Engineering) **Research Interests:** Software Engg., Intelligent Systems.

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<u>View Detailed Profile</u> Google Scholar Profile

## Prof. Vijay Laxmi

**Professor** 

Ph.D.,M.Tech.(CSE),B.E.(ECE)

Research Interests: Information Security, Machine Vision, Embedded Systems, Multi-Core And Cloud

Computing.

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<u>View Detailed Profile</u> Google Scholar Profile

#### **Associate Professor**

# Dr. Dinesh Gopalani

**Associate Professor** 

Ph.D.(CSE),M.Tech.(CSE),B.E.(CSE)

**Research Interests:** Theoretical Computer Science, Compilers And Programing Languages, Aspect Oriented Systems, Formal Theory Of Programming Languages, Natural Language Processing.

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View Detailed Profile

Google Scholar Profile ResearchGate Profile

# Dr. Meenakshi Tripathi

### **Associate Professor**

Ph.D.(CSE (Wireless Sensor Network Security)), M. Tech. (CSE), B.E. (CSE)

**Research Interests**: Secure Routing In Wireless Sensor Networks, Network Security, Wireless Sensor Networks, Wireless Ad hoc Networks, Opportunistic Networks, Software Defined Networks, Blockchain, Cyber Security, Information Security, Internet of Things.

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View Detailed Profile

Google Scholar Profile ResearchGate Profile Personal Website

### Dr. Mushtaq Ahmed

#### **Associate Professor**

Ph.D.(Computer Engg.), B.E.(Computer Engg.)

**Research Interests**: Network on Chip, Computer Networks, Embedded Systems, Multi-Core And Cloud Computing, Wireles Sensor Networks, Fault Tolerant Systems, High speed Overlay Networking,

mahmed.cse@mnit.ac.in 01412713361

View Detailed Profile

Google Scholar Profile ResearchGate Profile Personal Website Biosketch

#### Dr. Neeta Nain

### **Associate Professor**

Ph.D.

Research Interests: Image Processing, Pattern Recognition, Computer Graphics, Machine Learning,

Deeplearning.

nnain.cse@mnit.ac.in 01412713285

View Detailed Profile

Google Scholar Profile BibBase Profile Personal Website

#### Dr. Pilli Emmanuel Shubhakar

#### **Associate Professor**

Ph.D.(CSE),M. Tech.(CSE),B.Tech.(ECE)

Research Interests: Security, Privacy and Forensics, Cloud Computing, Big Data, Internet of Things,

Blockchain, Quantum Computing.

espilli.cse@mnit.ac.in 01412713376

View Detailed Profile

Google Scholar Profile ResearchGate Profile Personal Website

# Dr. Yogesh Kumar Meena

### **Associate Professor**

Ph.D.,M.Tech.,B.Tech.

Research Interests: Natural Language Processing, Information Retrieval, Data Mining, Neural Networks.

ymeena.cse@mnit.ac.in 01412713420

View Detailed Profile
Google Scholar Profile

#### **Assistant Professor**

#### Dr. Arka Prokash Mazumdar

## **Assistant Professor**

Ph.D.(CSE),M.Tech.(CSE),B.E.(Information Technology)

Research Interests: Computer Networks, Wireless Sensor Networks, Wireless Ad hoc Networks,

Opportunistic Networks, Internet of Things, Intelligent Transportation Systems.

apmazumdar.cse@mnit.ac.in 01412713452

View Detailed Profile

Google Scholar Profile BibBase Profile Personal Website

#### Dr. Ashish Kumar Tripathi

# **Assistant Professor**

Ph.D.(CSE),M.Tech.(CSE),B.Tech.(CSE)

Research Interests: Big Data, Soft computing techniques, Data Clustering, Machine Learning.

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<u>View Detailed Profile</u> Google Scholar Profile

### Dr. Deepak Ranjan Nayak

#### **Assistant Professor**

Ph.D.(CSE),M. Tech.(CSE),B. Tech.(CSE),PostDoc(CSE)

Research Interests: Medical Image Analysis, Machine Learning, Deep Learning, Pattern Recognition,

Computer Vision, Hyperspectral Image Analysis.

drnayak.cse@mnit.ac.in

View Detailed Profile

Google Scholar Profile Personal Website

# Dr. Dinesh Kumar Tyagi

## **Assistant Professor**

Ph.D.(CSE), M.Tech.(CSE), B.E.(CSE)

**Research Interests:** Computer Networks, WDM Networks, Intelligence at Edge Networks, Nature Inspired Algorithms, Blockchain, Internet of Things.

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View Detailed Profile
Google Scholar Profile

### Dr. Jyoti Grover

### **Assistant Professor**

Ph.D.(CSE)

**Research Interests:** Wireless Ad Hoc Networks, Vehicular Networks, Software Defined Networks, Internet of Things, Network Security, Machine Learning for Networking.

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Google Scholar Profile ResearchGate Profile

#### Dr. Lavika Goel

#### **Assistant Professor**

Ph.D.(Computer Engineering), M.E.(Computer Tech. & Applications), B.Tech.(Computer Sc. & Engg.) **Research Interests:** Artificial Intelligence, Bio And Nature Inspired Algorithms, Computational Intelligence, Evolutionary Computing, Intelligent Systems, Machine Learning, Optimization, Remote sensing, Image processing and pattern recognition.

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<u>View Detailed Profile</u> Google Scholar Profile

# Dr. Mahipal Jadeja

# **Assistant Professor**

Ph.D.(CSE),B.E.(CSE)

**Research Interests**: Theoretical Computer Science, Graph Theory, Algorithms, Information Visualisation, Graph Visualisation, Machine Learning on Graphs, Social Network Analysis, Graph Neural Networks.

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View Detailed Profile

Google Scholar Profile Personal Website

#### Dr. Ramesh Babu Battula

### **Assistant Professor**

Ph.D.(CSE),M.Tech.(CSE),B.Tech.(IT)

**Research Interests**: Information Security, Secure Communication, Next Generation (xG) Networks, Computer Security, Intelligent Communication and Networks (5G and Beyond 5G).

rbbattula. cse@mnit.ac.in 01412713497

# Dr. Santosh Kumar Vipparthi -on Lien

### **Assistant Professor**

Ph.D.(Systems Engineering ), M.Tech. (Honours-Systems Engineering ), B.E. (Andhra University)

**Research Interests**: Image Processing, Pattern Recognition, Machine Learning, Deep Learning, Computer Vision, Artificial intelligence, Video Processing.

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Google Scholar Profile BibBase Profile Personal Website

# Dr. Satyendra Singh Chouhan

# **Assistant Professor**

Ph.D.(CSE), M.Tech.(CSE), B.E.(IT)

**Research Interests:** Artificial Intelligence, Natural Language Processing, Deep Learning, Continual Machine Learning, Open-world Machine Learning.

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<u>View Detailed Profile</u> Google Scholar Profile

#### Dr. Smita Naval

#### **Assistant Professor**

Ph.D.(CSE),M.Tech.(CSE),B.E.(CSE)

**Research Interests**: Information Security, Malware Analysis, Privacy Breach, Pattern Recognition, Machine Learning.

smita.cse@mnit.ac.in View Detailed Profile Google Scholar Profile

# **Adjunct Faculty**

# Prof. Richa Singh Adjunct Faculty

Ph.D.(Computer science)

Research Interests:.

View Detailed Profile

# Dr. Sameep Mehta

### **Adjunct Faculty**

Ph.D.(CS)

**Research Interests:** Data Management, Artificial Intelligence, AI for Business Automation, AI Transparency, Foundation Models, Trustworthy AI.

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Personal Website

# Prof. Virendra Singh Adjunct Faculty

Ph.D.(Computer Science), M.E.(Electronics & Communication), B.E.(Electronics & Communication) Research Interests: Cyber Security, Computer Architecture, Processor architecture & micro-architecture, Memory system design, Reconfigurable computing, Adaptive computing/architectures, Compiler support for modern architectures, Fault-tolerant computing, Robust design and architectures, Self-healing system design, VLSI testing and design for testability, SoC/NoC design and test, Post silicon debug, High level synthesis, Formal verification, Trusted computing, FPGA based acceleration, Trusted hardware design, Cyber physical systems, Network router design and algorithms, Software defined networking (SDN), Blockchain.

### View Detailed Profile

Staff:

Mr. Mohan Ram Choudhary Technical Assistant (SG-II)

MSc (Computer Science), MBA, MIEE

**Expertise**: Data Centre Administration, Cloud Computing & Virtualization.

mohan.ccc@mnit.ac.in

# Mr. Arun Kumar Sharma

**Senior Technician** 

B.Tech. in ECE, M.Tech. in VLSI

Expertise: Digital System Lab, Microprocessor Lab, IOT & Real Time Embedded System Lab

arunsharma.ece@mnit.ac.in

Ms. Laxmi Meena Senior Technician

B.Tech(CSE), M.Tech (CSE)

Expertise: Database Management System, Computer Networking

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Mr. Sanjay Kumar Bhaskar Senior Technician MCA, Diploma

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Mr. Arun Kumar Technician

Diploma

**Expertise**: Computer Networking Lab

arun.cse@mnit.ac.in

Mr. Devesh Kumar Sharma

**Technician** 

B.Tech. IT,M.Tech.CSE

**Expertise**: Data Science(Data Mining and AI).

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# Mr. Kautilya Bhardwaj

**Technician** Diploma

**Expertise**: ISEA LAB kautilya.cse@mnit.ac.in

#### Mr. Rohan Sharma

**Technician** 

Senior Secondary Science

Expertise: Computer Hardware, SQL

rohansharma@mnit.ac.in

Mr. Sajjan Ram
Junior Assistant
Senior Secondary
sajjanram.cse@mnit.ac.in

**Facilities** 

# **Cloud & Data Science Lab**

**Details Of Equipment / Computer System:** Dell OptiPlex 5040 Processor : - Intel(R) Core(TM) i7-6700 CPU @ 3.40GHz 3.41 GHz RAM :- 16.0 GB Hard Disk : - 500GB Network Card : - 10/10/1000 Mbps

SoftwareInstalled: OSUbuntuGCC,PythonNo.ofSystem: 54Nos

Projector: 1 Nos

# **Computer Network Lab**

Details Of Equipment / Computer System: Processor Pentium Core i7 RAM 4GB 500 GB HDD

Software Installed: OS Ubuntu Gcc Python, MatLAB

No. of System: 30 Nos Projector: 1 Nos

# Minsky Research Lab

Details Of Equipment / Computer System: Workstation Supermicro Intel Xeon Silver 4110 CPU@2.10 GHz

x32, 96 GB RAM, 04 TB SSD DISK Graphics: GeForce RTX 2080/Ti/PCle/SSE2, 27" Monitor

Software Installed: OS Ubuntu

No. of System: 06 Nos

# **Software Design Lab**

Details Of Equipment / Computer System: HP Elite Desktop 800 G1 SFF, I-7 (4770-3.4 GHz), 4 GB DDR3

RAM, 500 GB Sata HDD, with 18.5" ICD Monitor

Software Installed: Ubuntu 20.04 LTS

No. of System: 29 Nos

Projector: 1 Nos 10 KVA UPS: 1 Nos

# **Real Time Embedded System Lab**

Universal microcontroller Development (UMD) Board: 15

Zig bee Technology Trainer Kit :5 GSM development Board : 5

SENSOR MODULES and Other Interfaces:5

Bluetooth Trainer Kit : 2 Smart Phone Trainer Kit : 2

Object Detection and tracking using Tracked Robo Kit using Raspberry Pi / AVR / ARM/ Arduino: 1

# **Digital System Lab**

Digital Lab Trainer (Bread Board Model ME1154 With Complimentary Ready to Use Model): 25

8085 Microprocessor Trainer - Micro 85EB-LCD - : 25

8086 Microprocessor Trainer - Micro 86 LCD -: 25

Keyboard & Display Interface Board (VBMB 001)-: 10

2 Channel DAC Interface Board (VBMB-002): 10

8 Channel ADC Interface Board (VBMB 003): 10

8251 & 8253 Interface Board (VBMB 004): 10

8259 Interface Board (VBMB - 007): 10

8255 Interface Board (VBMB 008): 10

DC Motor Speed Measurement: 10

Digital Storage Oscilloscope, High Performance With DVM &Wavegen Agilent DSOx2014A with DSOX2000-

DVM & DSO2000-001 all media & Manuals analog BW 100MHz, 4 Digital Channels, Built in Function generator 20 Mhz& Digital Volt Meter 3 Digit Enabled (30) & DSOX2MSO –MSO Upgrade -8 Channel for

2000 X-Series Oscilloscope (05): 30

Atlys Spartan 6 FPGA Development Kit: 18

NetSim Academic version v12.2 perpetual and floating I: 30 users license

NetSim Standard version and Emulator version v12.2 perpetual and floating: 05 users license

#### IOT Lab

Universal embedded mother board: 5

Arduino YUN daughter boards: 5

ARM 7 Daughter Board: 5

Raspberry Pi development board: 5

GSM Interfacing Module: 5 Bluetooth Interfacing Module: 5 RFID Interfacing Module: 5

XBEE Interfacing Module: 5

Temp. measurement sensor module: 5

Tmote Sky Dev. Sensor Board: 5

Wireless Modem: 5 BeagalBone Black: 5

Pressure measurement sensor module: 5

Stepper motor interface module: 2

IoT Training Kit: 2

# **ISEA Lab (Information Security Lab)**

**Details Of Equipment / Computer System:** Dell OptiPlex 7440 (AIO) Processor : - Intel(R) Core(TM)

i5- 6500 @ 3.20GHz RAM :- 4.0 GB Hard Disk : - 500GB Network Card : - 10/10/1000 Mbps

Software Installed: OS Ubuntu GCC, Python

No. of System: 20 Nos

Details Of Equipment / Computer System: Dell OptiPlex 9020 Processor : - Intel(R) Core(TM) i5-4590 @ 3.30GHz RAM :- 16.0 GB Hard Disk : - 500GB Network Card : - 10/10/1000 Mbps 19.5TFTSoftwareInstalled: OSUbuntuGCC,PythonNo.ofSystem: 14NosProjector(CasioXJ-V2): 01Nos

APC-Smart UPS RT-5000, 5KVA: 02 Nos

# Ramanujan Lab

Details Of Equipment / Computer System: Wipro Pentium i3 RAM 4GB 500 GB HDD

Software Installed: OS Ubuntu

No. of System: 35 Nos

### **Kalam Research Lab**

**Details Of Equipment / Computer System:** Single Intel Xeon 16 Core, 2.10 GHz, 22 MB cache, 960 GB SSD, 2No NVIDIA Quadro RTX 6000 with 24GB DDR6, 2TB 7200 RPM Enterprise SATA Hard Drive. **Software Installed:** Ubuntu 18, Python, tensor flow, Pytorch

No. of System: 01 Nos

Details Of Equipment / Computer System: Intel Xeon, 2.10 GHz,1No NVIDIA Titan V with 12GB, 1TB

Hard Drive

Software Installed: Ubuntu 18, Python, tensor flow, Pytorch

No. of System: 01 Nos

# Miscellaneous

Six UG/PG Labs; Six Research Labs; One Server room

DFB room; office with reprographic facility, telephone and fax, printer available for students/faculty Individual faculty rooms with Computing, Internet, telephone

Seminar hall – equipped with overhead LCD projector, computer, Internet connectivity Committee room – equipped with overhead LCD projector, computer, Internet connectivity

Two Tutorial rooms

Record room -Reports, Books

Departmental Store room

# Committee

# **Department Under-Graduate Committee (DUGC)**

bepartment order ordudate committee (bood)				
1	Dr. Ramesh Babu Battula	Convener		
2	Dr. Dinesh Gopalani	Member: Head		
3	Dr. Yogesh Kumar Meena	Member: Convener, DPGC		
4	Dr. Satyendra Singh Chouhan	Member: Prog Advisor I B. Tech		

5	Dr. Mahipal Jadeja	Member: Prog Advisor II B. Tech
6	Dr. Jyoti Grover	Member: Prog Advisor III B. Tech
7	Dr. Dinesh Kumar Tyagi	Member: Prog Advisor IV B. Tech
8	Prof. Vijay Laxmi	Member
9	Dr. Mushtaq Ahmed	Member
10	Pranshu Vyas	Student Member: IV B. Tech
11	Manvir Singh	Student Member: III B. Tech

**Department Post-Graduate Committee (DPGC)** 

	Department Post-Graduate Committee (DPGC)						
1	Dr. Yogesh Kumar Meena	Convener					
2	Dr. Dinesh Gopalani	Member: Head					
3	Dr. Ramesh Babu Battula	Member: Convener, DUGC					
4	Dr. Namita Mittal	Member: Prog Advisor I M. Tech CS					
5	Dr. Neeta Nain	Member: Prog Advisor II M. Tech CS					
6	Dr. Arka Prokash Mazumdar	Member: Prog Advisor I M. Tech CS_ IS					
7	Dr. Santosh Kumar Vipparthi	Member: Prog Advisor II M. Tech CS_IS					
8	Prof. Girdhari Singh	Member					
9	Dr. Pilli Emmanuel Shubhakar	Member					
10	Dr. Mushtaq Ahmed	Member					
11	Dr. Meenakshi Tripathi	Member					
12	Prof. R.K. Vyas/ Prof. Rajesh Kumar	Member: External					
13	Ravi Nahta	Student Member: Ph. D					
14	Kartikey Jain	Student Member: M. Tech CS					
		I .					

# **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

# Journal Publications (412)

# 2023

Jitendra Parmar, Satyendra Singh Chouhan, Vaskar Raychoudhury, "A machine learning based framework to identify unseen classes in open-world text classification", Information Processing and Management Volume: 60 / 1-18 / 2023

Lavika Goel, Giriraj Vaishnav, Siddharth Chand Ramola, Tushar Purohit, "A Modified Ant Colony Optimization Algorithm with Pheromone Mutations for Dynamic Travelling Salesman Problem", IETE Technical Review Volume: 0 / 1-16 / 2023

Manojkumar Pal, ML Mittal, Gunjan Soni, SS. Chouhan, Manish Kumar, "A multi-agent system for FJSP with setup and transportation times", Expert Systems With Applications Volume:216 / / 2023

Ashish Kumar Tripathi, K. Akul Krishnan, Avinash Chandra Pandey, "A Novel Blockchain and Internet of Things-Based Food Traceability System for Smart Cities", Wireless Personal Communications Volume: 129 / / 2023

**Funding Agency** 

Title of the project

**Project** 

Investigator

	Investigator	1 3	
1	Dr. Pilli Emmanuel Shubhakar	ZigBSec - Enhanced Security for ZigBee Networks	Data Security Council of India
2	Dr. Ashish Kumar Tripathi	Automated Maze Leaf Disease and Weed Detection in Extreme Weather Conditions Using Deep Neural Networks.	Doremon Labs
3	Dr. Arka Prokash Mazumdar	Scalable and Energy Aware Robust Recommendation Aggregation in IoT Trust Management	Data Security Council of India
4	Dr. Namita Mittal	Developing a user-friendly Chatbot system as an interface for information extraction in Natural language	ISRO- RACS, Department of Space
5	Dr. Lavika Goel	Design and Implementation of a Hybrid Nature Inspired and Machine Learning Based Intelligent Optimization Model for Crop Recommendation in Rajasthan, India	Department of Science and Technology (DST), Science and Engineering Research Board (SER
6	Dr. Mushtaq Ahmed	Crop Yield Enhancement by Soil Sensing	NewGenIEDC DST IIIT Allahaba
7	Dr. Dinesh Gopalani	Capacity building for human resource development in Unmanned Aircraft System (Drone and related Technology)	Ministry of Electronics and Information Technology (MeitY) Govt. of India
8	Dr. Pilli Emmanuel Shubhakar	Designing Hybrid Introspection enabled VMM-based Security Architecture to protect against attacks	Science and Engineering Research Board (SERB), Department of Scienard Technology
9	Dr. Smita Naval	A simulation and emulation oriented cyber testbed for training and defence in cybersecurity (RP0072)	IIT Jammu

#	Investigator	Title of the project	Funding Agency
10	Dr. Meenakshi Tripathi	A Study of the Usability and Accessibility of Various ICT Tools related to English Language Speaking and Reading Skills of Children with Autism Spectrum Disorder (ASD)	Department of Science and Industr Research (DSIR)

Shikha Mundra, Jaiwanth Reddy, Ankit Mundra, Namita Mittal , Ankit Vidyarthi , Deepak Gupta, "An Automated Data-driven Machine Intelligence Framework for Mining Knowledge To Classify Fake News Using NLP" , ACM Transactions on Asian and Low-Resource Language Information Processing Volume :22 (8) / 1-20 / 2023

P. K. Keserwani, M. C. Govil, E. S. Pilli , "An Effective NIDS Framework based on a Comprehensive Survey of Feature Optimization and Classification Techniques" , Neural Computing and Applications Volume :35 / 4993-5013 / 2023

# **Projects**

Project

- Research Projects
- Testing & Consultancy Projects

# **Research Projects**

# **Patents**

"BLOCKCHAIN AND IOT BASED ELECTRONICS HEALTH RECORD DEVICE", 1. Jitendra Goyal 2. Dr. Mushtaq Ahmed 3.Dr. Dinesh Gopalani 4.Dr. Aditi Sharma 5. Akash Yadav, Reg. No. 372608-001 [The Patent Office, Government of India]

Dt. 23-12-2022

"Trusted and secure configuration and validation of data for public IoT devices using block chain technology", Dumka, Ankur; Ashok, Alaknanda; Sharma, Aditi; Sarkar, Achyuth; Kumar, Vivek; Kumar, Naresh; Bansal, Pravesh Kumar; Ahmed, Mushtaq and Baheti, Prashant Kumar, Reg.No. 2020103294 [IP Australia (Australian Govt.)]

Dt.23-02-2020

" **THE SMART GAIT ANALYZER**", Dr Rajesh kumar, Chandra Prakash, Dr Namita Mittal , Reg.No. .201711014157 [Govt. of India] Dt.21-04-2017 Event Organized

National Seminar on **Machine Learning Enabled Signal Processing for Medical Applications** at MNIT, Jaipur, India from 14-08-2023 to 14-08-2023

National Seminar on **Agent-based Distributed Artificial Intelligence Framework** at MNIT Jaipur, Jaipur, India from 12-12-2022 to 12-12-2022

International FDP on IEEE CIS Summer School on Research Trends in Artificial Intelligence and Machine Learning for Engineering Challenges at MNIT (Hybrid Mode), Jaipur, India from 06-12-2022 to 10-12-2022

National Seminar on Recent Developments on Transformers and Its Applications to Computer Vision at MNIT, Jaipur, India from 30-09-2022 to 30-09-2022

National FDP on **Medical Image Processing** at MNIT Jaipur, Jaipur, India from 22-08-2022 to 02-09-2022

National Short Term Course on **Android Programming (Funded by E & ICT Academy)** at Jointly organized by IITG, NIT Patna, MNIT Jaipur and IITDM Jabalpur, Online, India from 18-07-2022 to 22-07-2022

National Symposia on **Digital India Week** at Mahatma Mandir, Gandhi Nagar, Gujrat, Gandhi Nagar, India from 02-07-2022 to 07-07-2022

International Short Term Course on **GIAN - Artificial Intelligence for Information Retrieval and Extraction ( AIRE)** at MNIT Jaipur, Jaipur, India from 09-05-2022 to 13-05-2022

National Workshop on **PROTEUS VSM: 8051, IoT Builder for Arduino, AVR for IoT, and Robotics Simulation** at MNIT JAIPUR, Jaipur City, INDIA from 06-05-2022 to 07-05-2022

National Workshop on **Machine Learning for Computer Vision** at Online, Jaipur, India from 21-02-2022 to 05-03-2022

National Short Term Course on **Natural Language Processing (Funded by E & ICT Academy)** at Jointly organized by NITP, IIT Roorkee, IIT Kanpur, IIITDM Jabalpur & MNITJ, Online, India from 07-02-2022 to 18-02-2022

International Conference on International Conference on Resilience and Transformation for Global Restructuring at MNIT,

### **Awards & Honours**

"Dr. Mushtaq Ahmed", ICECI 2023 International Conference paper1 for Best Paper Award: Deep Learning with encoders for Intrusion detection systems given by AMU Aligarh

"Dr. Mushtaq Ahmed", ICECI 2023 International Conference paper2 for Paper: An Expert system for analyzing the behavior of students in the higher Education given by AMU Aligarh

"Dr. Meenakshi Tripathi", Award of US\$5170 for For conducting IEEE CIS Summer School given by IEEE Computational Intelligence Society

**"Dr. Neeta Nain"**, Digital India Week 2 - 7 July 2022, Organiser for Project: Child Face Age Progression and Regression to Trace Missing Children, selected for DIW given by Government of India, Meity and NIC

"Dr. Dinesh Gopalani", Outstanding Teacher Award for given by MNIT Jaipur

"Dr. Lavika Goel", Priti Shankar Stree Shakti Samman for Received the 2022 Priti Shankar Stree Shakti Samman for being a feminine faculty in CS & IT given by Rethink India

"Dr. Deepak Ranjan Nayak", 2020 CMES Young Researcher Award (1000\$) for Outstanding research in computer modeling and simulation given by CMES, Tech Science Press, USA

"Dr. Lavika Goel", IEEE India Best Women Professional Award 2021. for Best Women Professional of the year. given by IEEE India Council and Hope Foundation and Research Center at IIT Guwahati, Guwahati

"Dr. Meenakshi Tripathi", Completion of Certificate for course on "Cryptography" given by Coursera

"Dr. Ramesh Babu Battula", Travel Grant for Conference given by COMSNETS 2019

"Dr. Neeta Nain", NVIDIA GPU GRANT for Research given by NVIDIA

"Dr. Meenakshi Tripathi", Active Participation Woman Award for Research given by CSI-India

## **Department by the Numbers**

Department by the Hambero		
30		
	Faculty	
943		
	Journal Publications	
1295		
	Conf. Publications	
44		
	Research Projects	
114		
	PhD Awarded	
Latest News		

#### **About the Department**

Welcome to the Department of Electrical Engineering at Malaviya National Institute of Technology, Jaipur. The Electrical Engineering Department is one of the oldest department of the institute which was established in the year 1963. At present the department offers both undergraduate and postgraduate courses in Electrical Engineering. The department has well equipped laboratories such as Electrical Machines laboratory, Power Systems Laboratory, Control Systems laboratory, Electrical Measurements laboratory, Power Electronics & Drives Laboratory, Electrical workshop & Computer

The department has undertaken a number of research projects/schemes with the financial assistance from AICTE, DST and MHRD, including international collaborative research projects. The department is also actively engaged in research, consultancy and testing in the area of Power Systems. The Department has been recognized as QIP centre for Ph.D. and M. Tech. for polytechnic colleges' faculty members. Presently department is offering three postgraduate programmes of Master of Technology, with specialization in Power Systems Engineering, Power Electronics and Power Systems Management, as both full-time and part-time programmes. The department is regularly producing research publications in international and national journals and conferences of international repute. Students get rich industry interaction while working for the degrees and

research. Several research scholars are pursuing Ph.D. degree in diversified fields of Electrical Engineering.

The higher ranked candidates in JEE Mains and CCMT opt for admission in B. Tech. (Electrical Engineering) and M. Tech. programmes at this department. Students passing out from this department get excellent placements through campus selection both in the core area industries and also in software companies of national and international level. Alumni of Electrical Engineering Department are very well placed in all sectors and have reached to the top echelons in the state/ central government organizations and the public sector undertakings including NAVRATNA companies.

#### Vision

To create a center of imparting technical education in electrical engineering of international standard and conducting research at the cutting edge of technology & emerging field of electrical engineering to provide quality man power for meeting the current and future challenges.

#### Mission

To provide quality education at under graduate and post graduate level in the field of Electrical Engineering for meeting the current and future requirement of power industry; to enhance and reorganize education and research in close interaction with industry and technological institution of national & international repute with emphasis on latest trends in engineering and technology.

#### **Contact Information**

### **Prof. Harpal Tiwari**

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People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

### Faculty

### **Head of Department**

### **Prof. Harpal Tiwari**

### **Professor**

Ph.D.(Engineering), M.Sc.(Engg. (System Engineering)), B.E.(Electrical)

**Research Interests**: Power System, Power Electronics, Non Conventional Sources Of Energy, Power Quality, Power conversion techniques for renewable energy system, Active Power Filter, Harmonic Mitigation Techniques, AI Applications To Power System And Electric Markets.

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Google Scholar Profile

#### **Professor-HAG**

### Prof. Khaleegur Rehman Niazi

#### **Professor-HAG**

Ph.D.(Electrical Engineering), M.E.(Control Systems), B.E.(Electrical Engineering)

**Research Interests:** Power System Operation And Control, Restructuring Of Distribution System, Al Applications To Power System.

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## Prof. Manoj Fozdar

#### **Professor-HAG**

Ph.D.(Electrical Engineering), M.Sc. (Power Systems & Drives), B.Sc. (Electrical Engineering)

**Research Interests**: Power System Operation And Control, FACTS Controllers, Power Systems Economics, Integration of DGs in Power Systems.

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Google Scholar Profile

#### **Professor**

### Prof. Rajesh Kumar

#### **Professor**

Ph.D.(Intelligent System), M.E.(Power Engineering), B.Tech.(Electrical Engineering)

**Research Interests**: Smart Grid, Robotics, Computational Intelligence, Intelligent Systems, Machine Learning, Power Conversion and Management.

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#### **Prof. Rajive Tiwari**

#### **Professor**

Ph.D.(Electrical Engineering), M.E.(Power Systems), B.E.(Electrical Engineering)

**Research Interests**: Power System Operation And Control, Smart Grid, Power System Dynamics and Voltage Stability Studies, FACTS Devices, Renewable Integration in Power Systems, Electric Vehicle (EV)Integration to Grid.

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#### **Associate Professor**

#### Dr. Anil Swarnkar

#### **Associate Professor**

Ph.D.(Electrical Engg.), M.Tech. (Power System Engineering), B.E. (Electrical Engg.)

Research Interests: Application Of Artificial Intelligence (AI) In The Power System Operation And Control.

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## Mr. Ashok Kumar Agarwal

### **Associate Professor**

M.Tech..B.E.

**Research Interests**: Electrical Machines, Energy Systems, Computer Applications, Power System, Network Analysis & Synthesis, Analysis & Design of Digital Logic Circuits.

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### Dr. Dipti Saxena

### **Associate Professor**

Ph.D.(Electrical Engg., Power System), M. Tech.(Electrical Engg, Control System), B. Tech.(Electrical Engg.) **Research Interests**: Power Quality, Distributed Generation, Electrical Vehicles, Signal Processing Applications to Power System, Energy Management in Smart grid, Fault Location in Smart Grid, Power Electronics Application in Power Systems, Microgrids.

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Google Scholar Profile

#### Dr. Kusum Verma

### **Associate Professor**

Ph.D.(Electrical Engineering), M.Tech. (Power System Engineering), B.E. (Electrical Engineering)

**Research Interests**: AI Applications to Power System Operation and Control, Power Systems Stability and Reliability, Integration of Electric Vehicles and Renewables in Power Grids, Demand Response Management, Electricity Markets, WAMS.

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Google Scholar Profile ResearchGate Profile

### Dr. Mukesh Kumar Shah

## **Associate Professor**

Ph.D.(Electrical Engineering), M.Tech. (Energy Systems), B.E. (Electrical Engineering)

**Research Interests**: Power System, Energy Systems, Electric Vehicle (EV)Integration to Grid, Electric Vehicles Integration in Power System, Electrical Vehicles, Electrical Vehicles and its Integration to PV and Grid, Electricity Markets, Energy Conservation and renewables, Energy Economics, Power Plants, Renewable Integration in Power Systems.

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View Detailed Profile

### Dr. Nikhil Gupta

### **Associate Professor**

Ph.D.(Electrical Engg.), M.Tech. (Power System Engineering), B.E. (Electrical Engg.)

**Research Interests**: Application Of Artificial Intelligence (AI) In The Power System Operation And Control, Demand Response Management in Power Systems, Electric Vehicles Integration in Power System.

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## Mrs. Nikita Jhajharia Associate Professor

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Research Interests: Power System. njhajharia.ee@mnit.ac.in 01412529063 View Detailed Profile

### Dr. Praveen Kumar Agarwal

#### **Associate Professor**

Ph.D.(Electrical Engineering), M. Tech. (Computer Science & Technology), B.E. (Electrical Engineering)

**Research Interests**: Power System, Electric Vehicle (EV)Integration to Grid, Cyber Security.

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View Detailed Profile

#### Dr. Prerna Jain

#### **Associate Professor**

Ph.D.(Electrical Engineering), M.E.(Power System), B.E.(Electrical)

**Research Interests:** Al Applications To Power System, Power Systems Economics, Deregulated Power System Operation in a Smart Grid Environment, Power System Planning, Trading of energy and ancillary service in electricity markets, Distribution System Congestion Management.

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#### Dr. Rohit Bhakar

### **Associate Professor**

Ph.D.(Electrical Engineering), M.Tech. (Power System Engineering), B.E. (Electrical Engineering)

**Research Interests:** Power Systems Restructuring, Power Systems Economics, Network Pricing, Electricity Markets, Game Theory, Risk Management, Ancillary Services, Energy Storage, Grid Integration of Renewables, Cyber Security, Power System Planning.

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Mr. Vinod Sahai Pareek Associate Professor

M.E.,B.E.

Research Interests: Power System.

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#### **Assistant Professor**

## Dr. Akhilesh Mathur Assistant Professor

Ph.D.(Electrical Engg.), M. Tech. (Power System, Electrical Engg.), B.E. (Electrical Engineering)

**Research Interests**: Data Driven modeling of active distribution network, Data Driven modelling of Energy assets, Steady state analysis: Power flow solution of active distribution system, Smart-grid, Microgrid, Short-circuit analysis: Fault calculations in Modern Distribution Systems, Smart-grid, Microgrid, State Estimation of Microgrid/Smart-Grid/Modern Distribution Grid.

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### Dr. Arun Kumar Verma Assistant Professor

Ph.D.( Power Electronics/ IIT Delhi),M.Tech.(Energy/Power Electronics/IIT D),B.E.(Electrical Engineering)

Research Interests: Power Electronics, Power Conversion Techniques for Wind & PV, Power Quality,

Renewable Integration in Power Systems, Smart Grid, Smart Buildings, Energy Systems, Active Power Filter,

Harmonic Mitigation Techniques, Electric Vehicle (EV)Integration to Grid, Bi-directional Power Flow.

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### **Dr. Hemant Kumar Meena**

#### **Assistant Professor**

Ph.D.( Signal Processing), M. Tech. (Information and Communication Technology), B. Tech. (Electrical-IIT Delhi)

**Research Interests**: Machine learning application, Signal and image processing, Power system optimization.

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#### Dr. Kapil Shukla

#### **Assistant Professor**

Ph.D.(Electrical Engineering), M.Tech. (Power Systems), B.Tech. (Electrical Engineering)

**Research Interests**: Power Electronics, Power Quality, Switching Techniques for Parallel Connected Converters.

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# Dr. Man Mohan Garg

#### **Assistant Professor**

Ph.D.(Electrical Engineering (IIT Roorkee)),M. Tech.(Electrical Engineering (IIT Roorkee)),B.E.(Electrical Engineering (IIT Roorkee)),B.E.(Electrical Engineering (IIT Kanpur))

**Research Interests**: Power Electronic Converter: Design, Modeling and Control Issues, Grid Integration of Renewable Energy Sources, Electrical Vehicles and its Integration to PV and Grid, Cyber Physical Energy System, High-Density High-Efficiency Microinverter, Control of DC and AC Microgrid Systems, Sliding Mode Control, Model-order Reduction of Higher-order Systems.

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## Dr. Nitin Gupta

#### **Assistant Professor**

Ph.D.(Electrical Engineering), M.E. (Power Electronics), B.E. (Electrical Engineering)

**Research Interests:** Power Electronics, Power Conversion and Management, Power conversion techniques for renewable energy system, Power Quality, Power quality improvement, Microgrids.

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#### Dr. Ravita Lamba

#### **Assistant Professor**

Ph.D.(Solar Photovoltaics), M. Tech. (Renewable Energy), B. Tech. (Instrumentation & Control)

**Research Interests**: Energy Systems, Energy Storage, Instrumentation, Neural Networks, Optimization, Control Systems, Renewable Integration in Power Systems, Thermoelectrics, Fuel Cell, Battery Technology.

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#### Dr. Sandeep N

#### **Assistant Professor**

Ph.D.(Electrical Engineering), M.Tech. (Power Electronics and Drives), B.E. (Electrical Engineering)

**Research Interests:** Power Electronics, Multilevel inverters.

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## Dr. Saravana Prakash P

#### **Assistant Professor**

Ph.D.(Electrical Engineering), M.Tech. (Electrical Drives and Control), B.Tech. (Electrical Engineering)

**Research Interests**: Power Electronics, Power Quality, Electrical Drives, Electrical Vehicles, Electric Vehicle (EV)Integration to Grid.

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#### Dr. Satish Sharma

### **Assistant Professor**

Ph.D.(Electrical Engineering), M. Tech. (Power Systems), B.E. (Electrical Engineering)

**Research Interests**: Power Systems Economics, Power Systems Restructuring, Multiagent Systems, Game theory applications to Power systems, Power system analysis & optimization.

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### Dr. Satyanarayana Neeli

### **Assistant Professor**

Ph.D.(Control and Automation, Electrical Engineering.), M.E.(Control Systems Engineering), B.Tech.(EEE) **Research Interests**: Discrete-time systems, Estimation, Optimal Control, Design of observers and Its control applications, Nonlinear control systems, Control of uncertain systems, Stability of time-delay systems, Predictive control.

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## **Dr. Vinay Pratap Singh**

#### **Assistant Professor**

Ph.D.(Electrical Engg), M. Tech. (Control and Instrumentation), B. Tech. (Electrical Engineering)

**Research Interests**: Control Systems, Applications of control to power systems and power electronics, Optimization, Artificial intelligence, Power system optimization, Image processing, Soft computing techniques, Neural networks, fuzzy logic, deep learning.

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## **Adjunct Faculty**

### Prof. Hari Om Gupta

### **Adjunct Faculty**

Ph.D.(Performance Optimization of Electronic Circuits), M.E.(Electrical Engineering (System Engineering & Operations Research)), B.E.(Electrical Engineering)

**Research Interests**: Load flow and short-circuit analysis of Modern Distribution Systems, Protection and operation of power transformer, Power quality improvement, Transformer Design, Electrical Power system Analysis And Control.

hariomgupt@gmail.com

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# Mr. Sushil Kumar Soonee

### **Adjunct Faculty**

B. Tech. (Power system), Research in Power System Operation (Power System Operation)

**Research Interests**: Power systems, Power Market Operations, Regulatory Affairs, Grid Integration of Renewables, Power System Logistics, Power System Operations, Power Pool Governance and Regulatory Affairs

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**Facilities** 

## **Power Systems Lab**

Advanced Simulators like Over Head Line and Fault Simulator, Digital Relays, Fault Locaters, High Voltage Testing equipment. Single and Three phase power analyzer (Fluke). Supported with modern simulation software like MATLAB, Power Systems Block Set, ETAP, PST, MiPower, etc.

### **Electrical Machines Lab**

Conventional machines like DC Motors, DC Generators, Single Phase & Three Phase Transformers, Single Phase Induction Motors, Three Phase squirrel Cage and Slip-ring Induction Motors, Synchronous Machines, Amplidyne Generator and other machines. Complete set of Recording characteristics of electrical machines, Single phase and three phase transformer experiment set up, Synchronous machine experiment set up with Virtual Instrumentation (Feedback, UK)

### **Power Electronics & Electric Drives Lab**

System components like Chopper Module, Inverter Module, Computer Module, Cycloconvertor, VVVF Module for IM Drive, and several Basic Power Electronics kits. All modern instruments in the area of computer controlled drives, Modern technique control mechanism with hardware. Instruments like D-Space, IGBT based Inverter, Matrix Convertor, IM Drive, PMBLDC Drive, MP Controlled DC Drive, Storage CRO, Power Analyzer, Voltage and Current Sensors.

### **Electrical Measurement & Instrumentation Lab**

All measuring instruments and bridges. Several computer units with LAB-VIEW software to understand the principles and working of various measurement techniques and devices. Transducer Kit with 8 modules (Feedback, UK), Milliamp Clamp Meter, Electrical Tester, Phase Rotation Indicator, Clamp Meter etc. (Fluke Make).

## **Control Systems Lab**

Modern control kits like Micro-processor controlled stepper motor, PID Simulator and System Simulators. Virtual Control Laboratory System for combinatorial experiments in the area of computer controlled servomotors. Control Engineering Trainer Kits like Temperature Control and flow control. Experiments for computer simulated systems based on MATLAB software. Function Generator Sine, Square and Triangle waveforms, 2 Channel 20 MHz Oscilloscope, 3?? Digit Digital LCD Multimeter, Power Function Generator: Sine, Square, Triangle and Trapezoid waveforms (Feedback, UK)

## Simulation and Modelling Lab

Sufficient and latest configuration (Pentium Dual Core Processor) computers with several advanced scientific, programming and simulation software.

#### **Electrical Science Lab**

Provides all the facilities to give practical awareness to entry level UG students.

### Microprocessor Lab

8085 Microprocessor kits (Kitek-5 nos), 8085 Microprocessor kits (Dynalog-2 nos), Study card of 8255, 8253, 8259, 8257, ADC, DAC, Digital IC Trainer, Digital Storage Oscilloscope

#### **Electronic Devices & Circuits Lab**

A study of the characteristics and qualitative internal action of commonly used micro-electronic devices for discrete and integrated circuits, such as diodes, junction field-effects transistors (JFETs), metal-oxide semiconductors FETs (MOSFETs), and bipolar junction transistors (BJTs). Application of these devices in basic amplifier circuits is explored in this Laboratory.

The lab is equipped with Digital Storage Oscilloscopes, Power supply Units (5V, 0-15V, 0-30V), Multimeters.

#### **Publications**

Journal Publications

- Conference Publications
- Book/Chapter Publications

## **Journal Publications (943)**

#### 2023

Vipin Chandra Pandey, Nikhil Gupta, Khaleequr Rehman Niazi, Anil Swarnkar, Tanuj Rawat, Charalambos Konstantinou, "A Bi-level Decision Framework for Incentive-Based Demand Response in Distribution Systems", IEEE Transactions on Energy Markets, Policy and Regulation Volume: 1 / / 2023

Francisco J. Montero, Ravita Lamba, Alfonso Ortega, Wolfram Jahn, Wei-Hsin Chen, Amador M. Guzman, "A bidirectional solar thermoelectric generator combining heat storage for daytime and nighttime power generation", Applied Thermal Engineering Volume: 224 / 119997 / 2023 ISBN: 1873-5606

M Morey, N Gupta, MM Garg and A Kumar, "A Comprehensive Review of Grid-connected Solar Photovoltaic System Architecture, Control and Ancillary Services", Renewable Energy Focus Volume: 45 / 307-330 / 2023

W. Huang, C. Gao, R. Li, R. Bhakar, N. Tai and M. Yu, "A Model Predictive Control-Based Voltage Optimization Method for Highway Transportation Power Supply Networks with Soft Open Points", IEEE Transactions on Industry Applications Volume:99 / 1-10 / 2023

Anil Jakhar, N. Sandeep and Arun Kumar Verma, "A Nine-Level Common-Ground-Type Boost Inverter for PV Applications", IEEE Journal of Emerging and Selected Topics in Industrial Electronics Volume:99 / / 2023

Priyanka Kushwaha, Vivek Prakash, Rohit Bhakar, "A novel framework to assess synthetic inertia & primary frequency response support from energy storage systems", Sustainable Energy, Grids and Networks Volume: 34 / 101052 / 2023

### **Projects**

- Research Projects
- Testing & Consultancy Projects

### Research Projects

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Hemant Kumar Meena	Development of Silicon Proven IP Cores, Transceiver IC and System Prototype for mmWave Radar Sensing in Healthcare and Security Applications	MeitY
2	Dr. Saravana Prakash P	Design and Development of Highly Reliable SiC/GaN Based Power Supply Unit for Space Mission	ISRO-RACS
3	Dr. Rohit Bhakar	Low carbon pathways for energy system planning and operation under the aspects of flexibility from transport sector	DST
4	Dr. Rohit Bhakar	Blockchain based Multi-Layer Energy Management System for Smart Buildings	DST
5	Dr. Man Mohan Garg	Internship on Modelling, Simulation & Hardware Development of DC-DC Converter Circuits	Science and Engineering Research Board, New Delh India
6	Dr. Man Mohan Garg	Modelling, Simulation and Hands-on Practice on Control of Power Electronics Converters for Green Energy Applications	Science and Engineering Research Board, New Delh India
7	Dr. Saravana Prakash P	Design and Development of High-Power Density Transformer- Rectifier-Unit for More Electric Aircraft Application	Science and Engineering Research Board (SERB)
8	Dr. Arun Kumar Verma	Design and Development of an Efficient On-Board Chargers for EVs	CRG-SERB
9	Prof. Rajesh Kumar	Artificial Intelligence for Optimal Integration of Renewable Energy Resources in Microgrids	UoS-Skoltech award
10	Dr. Arun Kumar Verma	Design and Implementation of Novel Grid-Tied Transformer-Less Boosting Inverter Topologies for Solar PV Applications	DST India
	<b>.</b>		

**Patents** 

"The smart gait analyzer", R. Kumar, C. Prakash, N. Mittal , Reg.No. 417146 [Patent Office Journal] Dt.09-01-2023

"An Amalgamated Prediction Method for Breast Cancer Detection Using Fuzzy Features", S. Verma, R. Kumar, S. Jhajharia, M. Jailia, M. Agarwal , Reg.No. 202211072105 [Patent Office Journal Dt.30-12-2022

"A New Modulation System for Peak Device Voltage Reduction and Improved THD in Differential Mode Inverters/Rectifiers", -, Reg.No. UIC-2023-025-01 [US Patent] Dt.11-11-2022

"A SINGLE STAGE BRIDGELESS PFC CONVERTER FOR CHARGING AN ELECTRIC VEHICLE", Saravana Prakash P, Monika Goyal, Sandeep N, Arun Kumar Verma, R Kalpana and Udaykumar R Yaragatti, Reg.No. 202211049135 [Indian patent office] Dt.29-08-2022

"SWITCHED - CAPACITOR MULTILEVEL INVERTER WITH SELF - VOLTAGE - BALANCING FOR HIGH - FREQUENCY POWER DISTRIBUTION SYSTEM", Jagabar Ali, Kaustubh Bhatnagar, Yam P. Siwakoti, Hussain M. Bassi, Muhyaddin Rawa, N. Sandeep , Reg.No. 11251719 B1 [US Patent]

Dt.15-02-2022

**"A multiphase transformer rectifier unit and a method thereof**", R Kalpana, Saravana Prakash P, Bhim Singh and G Bhuvaneswari , Reg.No. 201641040621 [Indian Patent Office] Dt.02-12-2021

"Artificial Intelligence Enabled Health Monitoring System (Aihms) For Grid Connected Solar Inverter", Ahteshamul Haque, Rajesh Kumar, K V S Bharath, M Ali Khan , Reg.No. 202011038582 [Patent Office Journal] Dt.22-04-2021

"Single-Phase Transformer-less Boosting Inverter with Leakage Current Elimination for Photovoltaic Application", Arun Verma, Sandeep N, Sangeeta Kumari and Manaswi , Reg.No. 202011050918 [Indian patent office]

Dt.23-12-2020

"An Automatic Food Allergy Detecting System And A Process For The Detection Thereof", Paarth Bir, Sudeshna Chakraborty, Rajesh Kumar, Pradeep Kumar, Parveen Berwal, Parveen Mor, Reg.No. 202011016209 [Patent Office Journal]

Dt.23-04-2020
Event Organized

International Short Term Course on IEEE Computational Intelligence Society (CIS) Summer School Artificial Intelligence and Machine Learning for Engineering and Social Science Research at MNIT, Jaipur, India from 04-09-2023 to 08-09-2023

National Short Term Course on Foundation Course in Electrical, Instrumentation, Civil, and Mechanical Engineering at MNIT, Jaipur, India from 08-08-2023 to 12-08-2023

National Workshop on **Industry Oriented National Stakeholder Workshop** at MNIT, Jaipur, INdia from 08-05-2023 to 09-05-2023

International Conference on International Conference on EEE Power Electronics, Drives and Energy Systems (PEDES-2022) at MNIT, Jaipur, India from 14-12-2022 to 17-12-2022

International Workshop on IEEE CIS Summer School on Research Trends in Artificial Intelligence and Machine Learning for Engineering Challenges at MNIT Jaipur, Jaipur, India from 06-12-2022 to 10-12-2022

International Conference on **IEEE INDICON-2022** at Cochin University of Science and Technology (CUSAT), Kochi, Kerala, India from 24-11-2022 to 26-11-2022

National Symposia on **Technical Poster Competition** at MNIT Jaipur, Jaipur, India from 14-10-2022 to 14-10-2022

International Conference on **IEEE SEFET-2022** at GRIET, Hyderabad, India from 04-08-2022 to 06-08-2022

National FDP on **Role of Power Electronics & Advances in Infrastructure for E-mobility in India** at MNIT, Jaipur, India from 11-07-2022 to 19-07-2022

International Short Term Course on **Multi Agent and Microgrid Concepts** at MNIT, Jaipur, India from 02-06-2022 to 06-06-2022

National Seminar on IEEE PES student branch chapter webinar on "Challenges and Opportunities for Frequency Control in Net-Zero Systems" by Dr. Priyanka Kushwaha, Energy Market Consultant, ICF Int. Inc. at MNIT Jaipur, Jaipur, India from 01-05-2022 to 01-05-2022

### **Awards & Honours:**

"Dr. Sandeep N", Listed in Top 2% Scientists in the world for Research for given by Standford University, USA.

"Dr. Ravita Lamba", Distinction in Doctoral (PhD) Research-2018 for Distinction in Doctoral Research Award for the PhD research work for the year 2018 by IIT Delhi given by IIT Delhi

"Dr. Sandeep N", Listed in Top 2% Scientists in the world for given by Standford University, USA.

"Dr. Ravita Lamba", SERB International Research Experience (SIRE) Fellowship for given by Science and Engineering Research Board, Department of Science and Technology, Government of India

**"Prof. Rajesh Kumar"**, Best paper Award for 2nd International Conference on Artificial Intelligence: Advances and Applications given by (ICAIAA 2021), Jaipur

"Prof. Rajesh Kumar", Best paper Award for Texas Power and Energy Conference given by (TPEC 2021), Texas

"Dr. Dipti Saxena", Best Paper Award for Presented Paper for IEEE Conference given by IEEE International Conference on Smart Technologies for Power, Energy and Control STPEC (2021)

"Dr. Dipti Saxena", First position holder for Electrical Distribution System Analysis course given by NPTEL

"Dr. Sandeep N", Listed in Top 2% Scientists in the world for given by Standford University, USA.

"Dr. Hemant Kumar Meena", POSOCO Power System Award for Best M.Tech Thesis given by POSOCO

"Dr. Rohit Bhakar", POSOCO Power System Award for Best M.Tech Thesis given by POSOCO

"Dr. Ravita Lamba", Research Excellence Award for International Conference on Computational Techniques and Applications (ICCTA)-2021 given by International Organizing Committee under the Research Foundation of Kolkata, India Electrical Engineering Society

	·	
Society Name/ Affinity Group	Faculty Advisor	Chair
IEEE Power & Energy Society Student Chapter	Dr. Satish Sharma	Ajay Kumar Verma, Ph.D. S Department of Electrical En
Think India	Dr. Arun Kumar Verma	
IEEE Systems, Man, and Cybernetics Society Student Branch Chapter	Dr. Vinay Pratap Singh, Assistant Professor, Department of Electrical Engineering	Mr. Veerpratap Meena, Ph.I Department of Electrical En
IEEE Systems Council Student Branch Chapter MNIT Jaipur	Dr. Vinay Pratap Singh, Assistant Professor, Department of Electrical Engineering	Mr. Veerpratap Meena, Ph.I Department of Electrical En
IEEE Biometrics Council Student Branch Chapter MNIT Jaipur	Dr. Hemant Kumar Meena, Assistant Professor, Department of Electrical Engineering	Mr. Veerpratap Meena, Ph.I Department of Electrical En
IEEE Control Systems Society Student Branch Chapter MNIT Jaipur	Dr. Akhilesh Mathur, Assistant Professor, Department of Electrical Engineering	Mr. Veerpratap Meena, Ph.I Department of Electrical En
IEEE Industry Applications Society Student Branch Chapter MNIT Jaipur	Prof. Rajesh Kumar, Professor, Department of Electrical Engineering, MNIT Jaipur	Mr. Naveen Gehlot, Ph.D. S Department of Electrical En Jaipur

## **Department by the Numbers**

24	Faculty
905	Journal Publications
800	Conf. Publications
61	Research Projects
111	PhD Awarded

### **About the Department**

Welcome to the Department of Electronics & Communication Engineering at Malaviya National Institute of Technology, Jaipur. Bachelor's course in Electronics & Communication Engineering was first started in 1984, initially in the Electrical Engineering Department. In 1994, the Department of Electronics & Communication Engineering came into existence as a separate entity. Its undergraduate & four postgraduate programmes constitute approximately 20% students strength of the Institute, thus giving it the of of the of status one largest Department the Institute. The first Master's degree programme was started in 1992. Currently, department offers an UG and four PG programme as mentioned below-

Sr. No.	Degree	Specialization	Year of Establishment
1	B Tech	Electronics and Communication Engineering (ECE)	1981
2	M Tech	Electronics & Communication Engineering	1992
3	M Tech	VLSI Design	2006
4	M Tech	Wireless & Optical Communication	2014
5	M Tech	Embedded Systems	2014

The Department also offers PhD programme in relevant areas. The Department has received grants from government & semi-government agencies such as MHRD, AICTE, Ministry of information Technology, UKEIRI, DST, DRDO and ISRO. The Department has active collaborations with renowned

Institutes & research institutes in India and abroad. The Department of ECE, at MNIT Jaipur has a blend of young as well as experienced, dynamic faculty members and is committed to providing quality education and research in the field.

#### Vision

To create a centre for imparting technical education of international standards and conduct research at the cutting edge of electronics & communication technology to meet the current and future challenges of technological development.

#### Mission

To create technical manpower for meeting the current and future demands of industry and academia: to recognize education and research in close interaction with electronics & communication & related industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the institute with sensitivity to social development and eye for opportunities for growth in the international perspective.

### **Contact Information**

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## People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

### **Faculty**

#### **Head of Department**

## Prof. Lava Bhargava

**Professor** 

Ph.D.(VLSI, IITD),M.E.(VLSI, MREC Jaipur),B.E.(ECE, MREC, Jaipur)

**Research Interests**: Low power VLSI systems, FPGAs, Embedded Systems and IoT, MEMS, Test, SoC verification, Memristor devices.

#### Professor-HAG

#### Prof. K. K. Sharma

**Professor-HAG** 

Ph.D.(Signal Processing-IIT Delhi),M.E.(Electronics & Comm. Engg.),B.E.(Electronics & Comm. Engg.) **Research Interests:** Signal and image processing, Fractional transforms, Electromagnetics, Wireless Communications.

kksharma.ece@mnit.ac.in 01412713461

View Detailed Profile

Google Scholar Profile

## Prof. Rajendra Prasad Yadav

#### **Professor-HAG**

Ph.D.(Communication Engg ), M. Tech.(Integrated Electronics and Circuits )

**Research Interests**: Error Control Codes and MIMO-OFDM, RF and Antenna Systems, Mobile and Wireless Communication Systems, Optical Switching and Materials, Mobile Adhoc and Sensor Network, Device Characterization and MEMS, Cognitive Radio Networks.

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<u>View Detailed Profile</u> Google Scholar Profile

#### **Prof. Vineet Sahula**

#### **Professor-HAG**

Ph.D.(EE VLSI, IIT Delhi 2001), M.Tech. (Int. EC & Ckts, IEC IITD 1989), B.E. (Electronics, MNIT 1987)

**Research Interests**: Resilience, Trust & Security in Hardware, EDA for VLSI/Embedded-Systems, Cognitive Architectures.

vsahula.ece @ mnit.ac.in 01412713336

View Detailed Profile

Google Scholar Profile ResearchGate Profile BibBase Profile Personal Website

#### **Professor**

#### Prof. D. Boolchandani

### **Professor**

Ph.D.,M.Tech.,B.E.

**Research Interests**: Surrogate models for Analog and Digital subsystems, Interface circuits for On Chip MEMS Based Sensor and Actuators, MEMS Based Inertial Sensors.

dbool@ieee.org, dboolchandani.ece@mnit.ac.in 01412713334

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### **Prof. Ghanshyam Singh**

#### **Professor**

Ph.D.(Electronics and Communication ), M.Tech. (Electronics and Communication ), B.E. (Electronics & Telecomm. Engg.)

**Research Interests**: • Optical Communication Engineering: All Optical Switches, Optical Logic Gates & Circuits, Photonic Crystal Fibers, Nanophotonics, Nano-optical stru, Sensors, Integrated Photonics, Al for Photonics.

gsingh.ece@mnit.ac.in 01412713431

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Google Scholar Profile ResearchGate Profile BibBase Profile Personal Website

#### Prof. M. M. Sharma

#### **Professor**

Ph.D.(ECE), M.Tech. (Computer Technology), B.E. (Electrical Engineering)

**Research Interests**: Satellite and Wireless Communication, Microstrip antennas and arrays and VLSI Design, • RF and Microwave Engineering: RF & Microwave devices, Microstrip and Smart Antennas., Wireless Communications, Frequency Selective Surfaces, Absorbers and Rasorbers, , Reconfigurable Antennas, Circular Polarized Antennas.

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Google Scholar Profile Personal Website

### Prof. Vijay Janyani

#### **Professor**

Ph.D.(UK),M.E.(Electronics & Electrical Comm),B.E.(Electronics and Comm)

**Research Interests:** Optical Communication, Optoelectronics and Photonics, Numerical Modelling, Nonlinear Optics, RF and Microwaves, Optical Networks, Solar Energy.

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#### **Associate Professor**

#### Mr. Rakesh Bairathi

## Associate Professor

M.Tech.(Electrical Engineering), B.Tech.(Electrical Engineering)

**Research Interests**: Microprocessor, Digital Systems And Computers, Computer Networks, Computer Architecture, Embedded Systems and IoT.

rbairathi.ece@mnit.ac.in 01412713268

View Detailed Profile

#### Dr. Ritu Sharma

### **Associate Professor**

Ph.D.(Photonics Engg.), M. Tech. (VLSI), B.E. (Electronics and Communication)

**Research Interests**: Communication Engineering and Optics, Fabrication and Characterization of Nanoelectronic and Nanophotonic Devices based on Low-cost Materials, Nanomaterials for Nanophotolectronic and Nano-piezoelectric Devices, Optoelectronics and Photonics, Solar cell, Biophysics, MEMS and Nanoelectronic Devices, Optoelectronics, Pattern Recognition.

rsharma.ece@mnit.ac.in 01412520017

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Google Scholar Profile

### Mr. Sanjeev Agrawal

#### **Associate Professor**

M.Tech.(Computer Tech.), B.E.(Electrical Engg.)

Research Interests: Microprocessor Based Systems, Distributed Database and Computer Networks.

sanagrawal@hotmail.com 01412713287 View Detailed Profile Google Scholar Profile

#### Dr. Tarun Varma

### **Associate Professor**

Ph.D.(ECE),M.E.(ECE),B.E.(ECE)

Research Interests: Signal Processing, Computer Networks, Nano-electronic Devices, MNEMS.

tarun@mnit.ac.in 01412713354

View Detailed Profile

#### **Assistant Professor**

#### Dr. Amit Mahesh Joshi

#### **Assistant Professor**

Ph.D.(Electronics & Communication), M. Tech.(Communication), B.E.(Electronics)

**Research Interests**: FPGAs, Security, Privacy and Forensics, VLSI Signal Processing architectures, Real Time Systems, Machine learning approaches & applications to VLSI Design, Machine/Deep Learning, Cyber Security, Biomedical Signal Processing.

amjoshi.ece@mnit.ac.in

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Google Scholar Profile ResearchGate Profile BibBase Profile Biosketch

### **Dr. Bharat Choudhary**

#### **Assistant Professor**

Ph.D.(VLSI Design), M. Tech. (Nano Science and Technology), B. Tech. (Electronics and Communication Engineering)

**Research Interests:** Analog & Digital VLSI Design, Microelectronics, Low power VLSI systems, Nanoelectronics Device Modeling and Simulation.

bharat.ece@mnit.ac.in View Detailed Profile Google Scholar Profile

## Dr. C. Periasamy (On Lien)

### **Assistant Professor**

Ph.D.(Electronics Engineering)

Research Interests: MEMS and Nanoelectronic Devices, Materials for Sensors and Actuators.

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### Dr. Deepak Bharti

### **Assistant Professor**

Ph.D.(Flexible Organic Electronics), M.E. (Microelectronics), B. Tech. (ECE)

**Research Interests**: Microelectronic Device Fabrication, Organic and Flexible Electronics, Thin Film Deposition Processes, Thin Film Sensors and Devices, Thin Film Transistors and Circuits, Triboelectric Nanogenerators, Self-Powered Sensors, Energy Harvesting.

deepak.ece@mnit.ac.in

## <u>View Detailed Profile</u> <u>Google Scholar Profile</u>

#### Dr. Ila Sharma

### **Assistant Professor**

Ph.D.(ECE),M.Tech.(ECE),B.E.(ET & T)

**Research Interests:** Signal Processing, Multirate Signal Processing, Multiplierless Filter and Filterbank, Digital Filter and Filter Banks Design, Multirate Techniques for Communication Systems, Cognitive Radio.

ila.ece@mnit.ac.in
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Google Scholar Profile

## Dr. Kuldeep Singh

### **Assistant Professor**

Ph.D.(Computer Vision), M. Tech. (Signal Processing), B.E. (Electronics & Communication)

**Research Interests :** Machine/Deep Learning, Computer Vision, Biometrics, Cyber Security, Medical Image Analysis.

kuldeep.ece@mnit.ac.in
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#### Dr. Menka Yadav

#### **Assistant Professor**

Ph.D.(Device Simulation and Modeling), M.Tech. (VLSI Design), B.E. (Electronics and Communication), Sr. Secondary (PCM), Secondary (-)

**Research Interests:** Device Characterization,MEMS and Sensor Networks, Digital and Analog CMOS circuits, Machine learning approaches & applications to VLSI Design, MEMS and Nanoelectronic Devices, Modelling And Simulation.

menka.ece@mnit.ac.in 01412723383

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## Dr. Rajendra Mitharwal

#### **Assistant Professor**

Ph.D.(Microwave Engineering),M.Tech.(Electrical Engineering),B.E.(Electronics& Telecommunication)

Research Interests: Computational Electromagnetics.

rajendra.ece@mnit.ac.in View Detailed Profile Google Scholar Profile

## Dr. Rajesh Saha

### **Assistant Professor**

Ph.D.(Advanced MOS Devices), M.Tech. (Mobile Comm. & Computing), B.E. (Electronics & Telecomm. Engg.) **Research Interests:** Modeling and Simulation Nano Devices, MEMS, Bio Sensing.

rajesh.ece@mnit.ac.in View Detailed Profile Google Scholar Profile

#### Dr. Ravi Kumar Maddila

#### **Assistant Professor**

Ph.D.(Telecommunications), M.Tech. (Opto Electronics & Laser Tech.), B.E. (Electronics & Telecomm.)

Research Interests: Optical Communication, Optical Wireless Communication, Free Space Optics,
Daylighting, Optoelectronics, Integrated Optics and Photonics.

rkmaddila.ece@mnit.ac.in 01411000000

View Detailed Profile

Google Scholar Profile ResearchGate Profile BibBase Profile Personal Website

## Dr. Sarthak Singhal

### **Assistant Professor**

Ph.D.(Microwave Engineering),M.Tech.(Microwave Engineering),B.E.(Electronics & Telecomm. Engg)

Research Interests: • RF and Microwave Engineering: RF & Microwave devices, Microstrip and Smart

Antennas., Electromagnetics, RF and Microwaves, Antennas, RF and Antenna Systems, Absorbers and

Rasorbers, , Frequency Selective Surfaces, Microstrip antennas and arrays and VLSI Design.

sarthak.ece@mnit.ac.in

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Google Scholar Profile BibBase Profile Personal Website

## Dr. Satyasai Jagannath Nanda

#### **Assistant Professor**

Ph.D.(Data Clustering & Signal Proc.), M.Tech. (Electronics & Comm. Engg.), B.E. (Electronics & Telecomm. Engg.)

**Research Interests**: Digital Signal Processing, Adaptive Signal Processing, Data Clustering, Neural Networks, Evolutionary Computing, Swarm Intelligence, Nature Inspired Optimization, Seismic Signal Processing.

sinanda.ece@mnit.ac.in 09549654237

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### **Facilities**

#### Laboratories

- 1. Basic Electronics Lab
- 2. Analog Circuit and Signals Lab
- 3. Communication Lab
- 4. Computing Lab
- 5. VLSI Design and Simulation Lab
- 6. Embedded System Lab
- 7. Digital Electronics & Microprocessor Lab
- 8. Optical Communication Lab
- 9. Photonics and THz Communication Lab
- 10. Electronics System Level design Lab
- 11. IC/MEMS Fabrication Lab
- 12. Computing Lab (E&ICT)
- 13. Advanced & Emerging Devices Lab

- 14. Prototyping and Reconfigurable System Lab
- 15. Digital Signal & Image processing Lab
- 16. EMI/EMC/Wireless Testing Lab

### **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## **Journal Publications (905)**

#### 2023

Khan Abdulkarim Abdulquyyaum, Shreyas Tiwari, Rajesh Saha, Shandiul Hoque, "Sensitivity extraction of step shape double gate (SSDG) TFET biosensor considering non-ideal scenario", Engineering Research Express Volume: 5 / 035049 / 2023

Poonam Devi, M. Ravi Kumar, "1 Gbps visible light communication system utilizing Mach-Zehnder Modulator", Journal of Optics - India Volume: 52 / 406-416 / 2023

Mohit Yadav, Muquaddar Ali and R.P.Yadav, "A Compact and Economical AMC backed Antenna Solution for Wearable Biomedical Applications", International Journal of Microwave and Wireless Technologies Volume: 10 / 1-10 / 2023

Pratyusha Nune, Santanu Mandal, Amit Saha, and Rajesh Saha, "A generic simple model of synaptic memristor with local activity for neuromorphic applications", Journal of Computational Electronics Volume: Accepted / / 2023

Basudha Dewan, Shalini Chaudhary and Menka Yadav, "A Label-Free Dielectric-Modulated Biosensor Using SiGe-Heterojunction Dual cavity Dual Metal Electrically Doped TFET", Engineering Research Express Volume: 1 / - / 2023 ISBN: -

JOOHI GARG, SANJEEV YADAV, and M M SHARMA, "A novel miniaturized loop based angularly stable and polarization independent multiband bandpass FSS structure for Wi-Max and WLAN applications", sadhana Volume:48 / 1-7 / 2023

Geetanjali Sharma, Amit M Joshi, Deepshikha Yadav, Saraju P. Mohanty, "A Smart Healthcare Framework for Accurate Detection of Schizophrenia using Multi-Channel EEG", IEEE Transactions on Instrumentation and Measurement. Volume: XX / / 2023 Projects

- Research Projects
- Testing & Consultancy Projects

## **Research Projects**

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Kuldeep Singh	Development of techniques for data traffic based analysis of smart systems	Defense Research & Development Organization (DRDO), Ministry of Defense Govt. of India
2	Dr. Amit Mahesh Joshi	Onboard spectral preprocessing for multispectral image compression using FPGA	ISRO
3	Dr. Amit Mahesh Joshi	iGLU Intelligent Glucose Measurement Device	DST (under NM-ICPS from IIT Indore DRISHTI Foundation)
4	Dr. Amit Mahesh Joshi	Febsz Intelligent Febrile Seizure Monitoring Device for Children	DST
5	Dr. Amit Mahesh Joshi	iGLU Non Invasive Glucose Measurement Device	MSME
6	Dr. Amit Mahesh Joshi	Insulin Management System for Type 1 Diabetes People	MeiTY
7	Dr. Ritu Sharma	Design , Fabrication and performance Evaluation of Flexible Piezoelectric Biomechanical Energy Harvester	SERB-Power Grant
8	Dr. Kuldeep Singh	Prototype Development of Artificial Intelligence based Portable Computer Aided Diagnosis System for Silicosis	Directorate of Specially abled People , Govt. Rajasthan
9	Dr. Bharat Choudhary	Development of Artificial Intelligence based functional prototype for the diagnosis of Urinary Tract Infection	M/S Techjivaa Software Private Ltd.
10	Prof. D. Boolchandani	Charge pump PLL frequency synthesizer design	ISRO

**Patents** 

"A Device for Detection and Prediction of Epilepsy Reoccurrence", Urvashi P. Shukla, Amit M. Joshi , Reg.No. 202311051949 [Svaarogyam Medical Device Pvt. Ltd. (Startup)] Dt.02-08-2023

"A System for Developing and Analyzing a Parameter of Bohm Quantum Potential", Ravindra Kumar Maurya, Brinda Bhowmick, Rajesh Saha , Reg.No. 202022105580 [Germany patent Granted]

Dt.10-11-2022

"A DEVICE FOR NON-INVASIVE BLOOD AND SERUM GLUCOSE LEVEL MONITORING AND CONTROL", Amit M. Joshi, Prateek Jain, Saraju Mohanty , Reg.No. 202011027041 [Publication Office of India] Dt.24-06-2020

"PORTABLE SYSTEM FOR FAST DETECTION OF P, QRS AND T WAVE FROM ECG SIGNALS", U. Bhatt, S. Singh, B. Bhowmick, and Rajesh Saha , Reg.No. 201931027301 [The Patent Office] Dt.09-08-2019

"Ultra Low Transconductance Amplifier using Carbon Nanofiled Field Effect Transistor ", Shailendra Tripathi, Mohd. Samar Ansari, Amit M Joshi , Reg.No. 201811024700 [Publication of Patent Office, India] Dt.03-07-2018

"A NOVEL APPROACH FOR FOCUSING OF ELECTRON BEAM IN A MULTI-BEAM KLYSTRON", , Reg.No. 201711010409 [MNIT and CEERI] Dt.24-03-2017

## **Event Organized**

International Conference on **4th International Conference on Data Science and Applications (ICDSA 2023)** at Malaviya National Institute of Technology, Jaipur, India from 14-07-2023 to 15-07-2023

International Short Term Course on **From Zero to Chip Design Workshop using OpenPOWER cores (IBM)** at MNIT Jaipur, Jaipur, India from 22-08-2022 to 02-09-2022

National Short Term Course on **Two Week Online Global Summer Faculty Development Program on Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB (AOT 2022)** at Electronics and ICT Academy, Malaviya National Institute of Technology, Jaipur, India from 08-08-2022 to 19-08-2022

National FDP on **Fundamentals of 5G & beyond wireless systems** at MNIT Jaipur, Jaipur, India from 01-08-2022 to 12-08-2022

International FDP on **Research methodology and authoring/reviewing Manuscripts** at MNIT Jaipur, Jaipur, India from 25-07-2022 to 05-08-2022

International Conference on International Conference on Paradigms of Communication, Computing and Data Sciences (PCCDS 2022)) at MNIT Jaipur, Jaipur, India from 05-07-2022 to 07-07-2022

National FDP on **Research Methodology** at MNIT Jaipur, Jaipur, India from 18-04-2022 to 29-04-2022

International FDP on **Scientific Computation and GUI Development Using MATLAB** at MNIT Jaipur, Jaipur, India from 21-03-2022 to 31-03-2022

National FDP on **Designing With FPGAs (Intel)** at MNIT Jaipur, jaipur, India from 14-03-2022 to 19-03-2022

National Workshop on **Designing With FPGAs (Intel)** at MNIT Jaipur, Jaipur, India from 12-03-2022 to 17-03-2022

National Short Term Course on **Numerical & engineering computation, optimization for Physicists, Scientists & Engineers using open-source- SCILAB** at MNIT Jaipur, Jaipur, India from 21-02-2022 to 04-03-2022

### **Awards & Honours**

"Dr. Satyasai Jagannath Nanda", Second Shanghai Cooperation Organisation (SCO) Nations Young Scientist for Second SCO-YSC Young Scientist in the field of Artificial Intelligence and Big Data Analysis given by Department of Science and Technology, Govt. of India and JNCASR, Bengaluru, Karnataka

"Dr. Satyasai Jagannath Nanda", Best Paper Award at 2nd IEEE Odisha International Conf. on ODICON-2022 for presenting paper title: A Many-objective Chaotic Whale Optimization based Automatic Clustering.. given by Faculty of Engineering & Technology (ITER), Siksha O Anusandhan (Deemed to be Univ.), Bhubaneswar

"Dr. Sarthak Singhal", Enlisted in top 2% Scientist in the world list for given by Stanford University and Elsevier

"Prof. Rajendra Prasad Yadav", Golden List of Reviewers for the year 2021 for Research Paper Reviewer given by IETE Journal of Research

"Dr. Rajesh Saha", IEI Young Engineers Award 2022-23 for given by The Institution of Engineers (India)

"Dr. Rajesh Saha", Best Paper Award for for Paper Presentation given by 4th Int. Conference DevIC 2021

"Dr. Amit Mahesh Joshi", Best Paper Award for IEEE -iSES for given by IEEE Computer Society of India

"Prof. Ghanshyam Singh", Chair (Elect) for OSA Technical Group on Optics in Digital Systems given by Optical Society of America

"Dr. Sarthak Singhal", Enlisted in top 2% Scientist in the world list for given by Stanford University and Elsevier

"Dr. Amit Mahesh Joshi", Mentor for Student Mentorship program 2021 given by IEEE Engineering in Medicine and Biology Society

"Prof. Ghanshyam Singh", Secretary IEEE Photonics Society (PHO36-Rajasthan) for To coordinate activities for Delhi Section Chapter, PHO36-Rajasthan given by IEEE

"Dr. Satyasai Jagannath Nanda", Best Paper Award at 10th International Conf. Soft Comp. for Problem Solving (Springer-SocProS-2020) for presenting paper title: A Model based on Fuzzy C-Means with Density Peak Clustering.. given by INDIAN INSTITUTE OF TECHNOLOGY INDORE, INDIA

Welcome to Department of Humanities and Social Sciences

## Department by the Numbers

11		
	Faculty	
159		
	Journal Publications	
175		
	Conf. Publications	
21		
	Research Projects	
65		
	PhD Awarded	

### **About the Department**

The Department of Humanities and Social Sciences at Malaviya National Institute of Technology (MNIT), erstwhile Malaviya Regional Engineering College (MREC), was established in 1965. The department offers a wide range of courses and runs a vibrant PhD program in English, Economics, Political Administration, Sociology Science. Public and inter-disciplinary The department of HSS at MNIT currently has nine faculty members who specialise in various contemporary areas of humanities and social sciences. The faculty members are engaged in highquality research and teaching. They have to their credit various research projects, books and research papers published in reputed national and international journals. The department contributes to expanding the frontiers of knowledge in Humanities and Social Sciences by regularly organising exciting scholarly activities, drawing on the multiple disciplines, and enriching the entire spectrum of students and faculty.

#### Vision

To be a centre of excellence in Humanities and Social Sciences, promoting teaching, learning and research for creating a society that is equitable, inclusive and democratic.

#### Mission

- To nurture a holistic learning environment which generates informed citizenship, global awareness, social investment and enterprise
- •To cultivate in students critical thinking and personal integrity through dialogue and collaboration
- •To prepare students to lead productive and fulfilled lives while working toward a just and sustainable world

## ---- Head of Department

**Contact Information** 

#### Dr. Preeti Bhatt

Head, Department of Humanities and Social Sciences
Malaviya National Institute of Technology

JLN Marg, Jaipur-302017

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### People

- Faculty
- Staff
- Research Scholars
- · PhD Awarded

### **Head of Department**

#### Dr. Preeti Bhatt

#### **Associate Professor**

Ph.D.,M. Phil.,M.A.,B.Sc.

**Research Interests**: Contemporary British Literature, English Language Teaching, Indian Writing in English, Diasporic Writing, Literary Criticism & Theory, Drama and Dramatic Technique, Canadian Literature.

pbhatt.hum@mnit.ac.in 01412713547

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Google Scholar Profile

#### **Professor**

## Prof. Manju Singh

### **Professor**

Ph.D.(Economics Fellow ICSSR),M.A.(Economics),B.A.(Economics, Psychology,App Stat),Post Doctoral (Economics ( Public Policy) ),Certified Counsellor for Study Skills (Behavioural Science ),Certified Mentor and Hub Coordinator (Community Engagement in Higher Education ),MOOC Certificate (Research for Impact ),Executive Education Course(Research Analysis )

**Research Interests**: Development Economics, Public Policy, Higher Education, Gender, Technology Diffusion, Rural Economics, Engaged Scholarship.

manjus.hum@mnit.ac.in

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#### **Prof. Nupur Tandon**

#### **Professor**

Ph.D.(English),M.A.(English),B.A.(English Hist Psy)

**Research Interests**: English Language Teaching, Fiction in English, Modern English Theatre, Feminist Literature.

nupurtandon@mnit.ac.in 01412723396

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## **Prof. Vibhuti Singh Shekhawat**

#### **Professor**

Ph.D.(Social Sciences),M. Phil.(Political Science),M.A.(Political Science),MBA(Operations Management),M.A.(Sociology),B.A.(History Honours)

**Research Interests**: Social Sciences, Industrial Management, Public Administration, Sociology, Political Science.

vibhutisingh@mnit.ac.in 01412713386

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### **Associate Professor**

## Dr. Dipti Sharma

#### **Associate Professor**

Ph.D.(Economics), M.A.(Economics), B.A.(Economics Honours & Pol. Sc.)

Research Interests: Economics and Management, Power Sector Reforms and Policies, Electricity Markets,

Energy Conservation and renewables, Green Finance, Climate Change and Sustainable Development.

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## Ms. Nanny Tripathi

**Associate Professor** 

M.A.(English), B.Sc.(Science)

Research Interests: Translation Studies, American Fiction.

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#### **Assistant Professor**

#### Dr. Nidhi Bansal

#### **Assistant Professor**

Ph.D.(Sociology), M. Phil.(Sociology), M.A.(Sociology), B.A.(Socio, Psychology, Eng. Lit.)

Research Interests: Sociology, Digital inequalities and marginalisation, Globalisation, society and culture, Science, technology and Society, Social Change, Rural development, Sociology of Gender, Sociology of Aging and elderly.

nidhib.hum@mnit.ac.in

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#### Dr. Nidhi Sharma

#### **Assistant Professor**

Ph.D.(Economics), M.A.(Economics), B.A.(Economics Honours)

Research Interests: Microeconomic Theory, Macroeconomic Theory, Applied Microeconomics, Behavioural Economics, Regional Economics, Emerging Economies.

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### Dr. Niraja Saraswat

#### **Assistant Professor**

Ph.D.(English), M. Phil.(English), M.A.(English), B.A.(Eng.Lit., Pol.Sc., Hindi Lit.)

Research Interests: Feminist Literature, Contemporary Indian Literature, Victorian Literature, English

Language Teaching. niraja.hum@mnit.ac.in

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### **Adjunct Faculty**

## Dr. Bhanwar Singh Chauhan

### **Adjunct Faculty**

Ph.D.(Management), M. Phil. (Management), Post Graduate Diploma in

Management(MBA),M.A.(Economics),Advanced Diploma in Management Research(Management)

Research Interests:

## View Detailed Profile Biosketch

Prof. Sudhir K. Jain
Adjunct Faculty
Ph.D.(--),M.A.(Economics),B.Sc.(--)
Research Interests:

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Biosketch

#### **Facilities**

The Department is furnished with all essential resources for research, teaching and learning of Humanities and Social Sciences.

## **PG Laboratory**

PG lab of the department is a state-of-the-art laboratory to provide a conducive research environment to the PhD scholars of the department. The lab is well equipped with modern computer terminals with internet connectivity and latest software, a printer and an LCD projector.

## **Language Laboratory**

The Language Laboratory is well-equipped with twenty-one computer terminals installed with the latest software for the teaching of communication skills. The language learning software includes the following:

#### 1. »The Sky Pronunciation Suite:

- 1. Phonemic Alphabet in English
- 2. Similar Sounds
- 3. Word and Phrasal Stress
- 4. Stress and Rhythm
- 5. Rhythms from Rainland

### 1. »Tense Buster:

- 1. Elementary
- 2. Lower Intermediate
- 3. Intermediate
- 4. Upper Intermediate
- 5. Advanced Compilation

### 1. »Study Skills Success:

- 1. Giving a short talk
- 2. Pre-listening strategies
- 3. Tackling a discussion essay
- 4. Accurate Grammar
- 5. Researching on the web
- 6. Inference in Listening
- 7. Skimming and scanning
- 8. Note-taking strategies
- 9. Vocabulary power
- 10. Topic sentences

## 1. »Author Plus:

- 1. 12 activity types
- 2. Audio and video capabilities
- 3. An image bank
- 4. Test Settings
- 5. Interface in Ten Languages
- 6. Online and network versions
- 7. A learner monitoring application
- 8. Comprehensive support

### 1. »Issues in English:

- 1. Getting started
- 2. Listening
- 3. Vocabulary
- 4. Grammar
- 5. Pronunciation
- 6. Writing

### 1. »Results Manager:

- 1. Integrates with Tense buster
- 2. Study skills Success
- 3. Reactions
- 4. Author Plus
- 5. Clarity Content Programmes

#### »Movie Talk English

#### **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## Journal Publications (159)

#### 2023

Sumedha Bhatnagar and Dipti Sharma, "Assessing Growth of Green Finance and Investment in Select Developed and Developing Countries", International Symposia in Economic Theory and Econometrics: Financial Technology and Social Development in Emerging Economies (Accepted) Volume:32 / / 2023 ISBN: 15710386

Dr. Niraja Saraswat, "Industry - Oriented Communication Skills: An Analysis of Engineering Graduates of Rajasthan", TELEMATIQUE Volume: 22 / 1051-1055 / 2023 ISBN: 1856-4194

Divya Jyot Kaur, Niraja Saraswat, Irum Alvi, "**Technology Enabled Language Learning: Mediating Role of Collaborative Learning**", Journal of Language and Education Indexed in Scopus, Web of Science, Q2 Journal Volume: 9 / 90-102 / 2023 ISBN: 2411-7390

Mohit Joshi and Niraja Saraswat, "The Construction of the Abled Other:ISL and Literatures", VOICES(Peer reviewed Journal) Volume:13 / 145-151 / 2023 ISBN: 2230-875X

Surbhi Sethi, Manju Singh, "Zooming the EdTech Door: Evidence of Investors Behaviour from Post-Covid India", Finance India Volume: XXXVIII-N1 / / 2023

#### 2022

**Projects** 

Research Projects

• Testing & Consultancy Projects

## **Research Projects**

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Niraja Saraswat	Technology Dissemination through Massive Open Online Courses for Skill Development and Supporting Higher Education with Advanced Learning Analytics for Effective Teaching	RISL (A govt. of Rajastha Undertaking)
2	Dr. Preeti Bhatt	Developing English Skills for Employability - Empowering Engineering Students of Rajasthan in the Globalised World	Technical Education Quali Improvement Programme Phase III
3	Prof. Manju Singh	Engaged Scholarship An Approach for Responsible Technical Higher Education	TEQIP III
4	Dr. Nidhi Bansal	Women and Engineering Education in India A Sociological Insight	TEQIP III
5	Dr. Niraja Saraswat	Industry Oriented Communication Training Pitfalls and Prospects in Context to the Engineering Graduates of Rajasthan	TEQIP III
6	Dr. Nidhi Sharma	Student Wellbeing in Technical Education Institutions of Rajasthan Creating Awareness & Sensitizing the Educators	TEQIP III
7	Prof. Manju Singh	Transfer of Environmentally Sound Technologies: Understanding Barriers in Rural Areas	Symbiosis International University, Pune
8	Dr. Nidhi Bansal	Young women and their Cyberspace	ICSSR, New Delhi
9	Prof. Vibhuti Singh Shekhawat	Politics of Alienation and Secessionism in North-Eastern India	ICSSR
10	Prof. Manju Singh	Evaluation study of Rural Telephony on behalf of Programme Evaluation Organisation	Planning Commission, Go of India, New Delhi

Patents

"Method for Misinfodemic Mitigation Using Truthful Information Curation through Cognitive Security Tools", Ajay Agarwal, Basant Agarwal, Niraja Saraswat & Priyanka Harjule, Reg. No. 2021105740 [The Commissioner of Patents, IP Australia, Australian Government]

Dt. 17-11-2021
Event Organized

National Seminar on **Panel Discussion on Gender Sensitization Know your rights and duties during the Orientation Programme 2023 Phase II** at MNIT, Jaipur, India from 27-08-2023 to 27-08-2023

National Seminar on **Panel discussion on Theme-based Discourse on Horrors of Partition** at MNIT, Jaipur, India from 14-08-2023 to 14-08-2023

National Seminar on **Panel Discussion on Gender Sensitization Know your rights and duties during the Orientation Programme 2023** at MNIT, Jaipur, India from 04-08-2023 to 04-08-2023

National FDP on Life Skills Management at MNIT, Jaipur, India from 17-04-2023 to 21-04-2023

National Seminar on **National Workshop on MSME (Innovative) Design Scheme** at MNIT , Jaipur, India from 24-03-2023 to 25-03-2023

International Seminar on Expert lecture on Canadian Multiculturalism and Nation Building by Prof Braj M Sinha, Professor of Religious Studies, University of Saskatchewan, Canada at MNIT, Jaipur, India from 13-02-2023 to 13-02-2023

National Workshop on Enhancing gender responsiveness- a discussion on the technical sector and urban planning practices at MNIT, Jaipur, India from 24-01-2023 to 25-01-2023

National Seminar on **Nurturing Human Values in Youth for Holistic Development** at KVA DAV College for Women, Karnal, Karnal, India from 06-12-2022 to 06-12-2022

National Workshop on **Orientation cum Review Workshop for UBA organized by RCI, MNIT Jaipur** at Malaviya National Institute of Technology, Jaipur, India from 28-11-2022 to 28-11-2022

National Seminar on Webinar on India- Mother of democracy organized by Electoral Literacy Club and Department of Humanities and Social Sciences at Malaviya National Institute of Technology, Jaipur, India from 26-11-2022 to 26-11-2022

#### **Awards & Honours**

"Prof. Manju Singh", Member, Selection Committee for recruitment of various faculty positions in DoHSS and DMS for given by NIT Hamirpur

"Prof. Nupur Tandon", Chair, Technical Session I for international Seminar on Post Truth: Actual versus Alternate Reality given by Kanoria PG Mahila Mahavidyalaya Jaipur

"**Prof. Nupur Tandon**", Certificate of Paper Presentation on Embodying The People Without a Land I for National Conference on Being and Becoming Articulating alterity across Mediums given by University of Delhi

"Prof. Nupur Tandon", Convenor for Board of Studies Meeting given by Rajasthan Institute of Skills Development

"Prof. Manju Singh", Member, Board of Studies for given by School of Social Sciences, Central University of Rajasthan

"Prof. Manju Singh", Member, Board of Studies in Applied Science Department for given by University College of Engineering, Banswara

"**Prof. Manju Singh**", Member, School Board, Social Science, 2022 for given by Central University of Rajasthan, Kishangarh

"Prof. Manju Singh", Member, Screening-cum-Evaluation Committee for CAS promotion of the University teachers given by Central University of Rajasthan

"Prof. Nupur Tandon", Nominated Member, Advisory Committee for given by KVA DAV College for Women, Karnal

"Dr. Dipti Sharma", Panelist in Session: Energy Security for Consultation on LDCs for NDCs given by Centre For Community Economics and Development Consultants Society

"Prof. Nupur Tandon", Peer-Reviewer for Review of proposed drama series given by Methuen Drama, Bloomsbury, London

## **Welcome to Department of Management Studies**

## **Department by the Numbers**

9
Faculty
176
Journal Publications
139
Conf. Publications

**27** 

### PhD Awarded

### **About the Department**

The DMS was established in 1996 as a Centre of Management Studies and Industrial Collaboration under a self-finance scheme. It was upgraded to a full-fledged academic department in 2004. Since its inception, DMS has played a seminal role in the growth of the corporate sector and management education in India. We use highly innovative teaching pedagogy to groom future business leaders by following a judicious blend of theory and practice.

#### Vision

To create a centre for imparting managerial education of international standards and conducting world-class research at the cutting edge of technology to meet the current and future challenges of technological development.

### Mission

To create techno-managerial manpower for meeting the current and future demands of industry; to recognize education and research in close interaction with industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the institute with sensitivity to social development and eye for opportunities for growth in the international perspective.

#### **Contact Information**

## Dr. Deepak Verma

Head, Department of Management Studies
Malaviya National Institute of Technology

JLN Marg, Jaipur-302017

0141-2713474

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## People

- Faculty
- Staff
- Research Scholars

PhD Awarded

### **Faculty**

### **Head of Department**

### Dr. Deepak Verma

### **Assistant Professor**

Ph.D.(Management), MBA(Information Systems, Marketing), BBA(Management)

Research Interests: Behavior in Online / Digital Environments, Issues in IT / IS adoption, Statistical

Decision-making, Business Analytics, Marketing Analytics, Survey Research Methods.

dverma.dms@mnit.ac.in 01412713399

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Google Scholar Profile
Personal Website

#### **Associate Professor**

#### Dr. Monica Sharma

#### **Associate Professor**

Ph.D.(Industrial Engineering), MBA(Production & Operations Mgmt.), B.E.(Mechanical)

**Research Interests**: Industrial Engineering, Lean manufacturing, Materials Management, Operations Management, Operation Research, Total Quality Management, Manufacturing Excellence, Sustainable Manufacturing, Six Sigma.

msharma.dms@mnit.ac.in 01412713212

View Detailed Profile

Google Scholar Profile ResearchGate Profile

## Dr. Satish Kumar -on Lien IIM Nagpur

### **Associate Professor**

Ph.D.(Finance), MBA(Finance), B.Com(Commerce)

**Research Interests**: Corporate Finance, Financial Markets, Behavioural Finance, Survey Research in Finance, Small Business Financing, Bibliometric analysis and LR, Corporate Governance.

skumar.dms@mnit.ac.in 01412713491

<u>View Detailed Profile</u> Google Scholar Profile

### **Assistant Professor**

### Dr. Aakanksha Kataria

#### **Assistant Professor**

Ph.D.(I/O Psychology/Organizational Behavior)

**Research Interests**: Organizational psychology, positive psychological interventions, employee behavior and well-being.

aakanksha.dms@mnit.ac.in 01449650766

View Detailed Profile

Google Scholar Profile

#### Dr. Divesh Kumar

#### **Assistant Professor**

Ph.D.(Marketing), MBA(Marketing), B.Sc. (Maths), Sr. Secondary (PCM), Secondary (Science)

**Research Interests**: Business to Business Marketing, Sustainable Consumption Behavior, Value cocreation, Sustainable Supply Chain.

divesh.dms@mnit.ac.in 01412713548

View Detailed Profile

Google Scholar Profile ResearchGate Profile BibBase Profile Personal Website

#### Dr. Reeta Singh

#### **Assistant Professor**

Ph.D.(Human Resource Management), MBA(HRM and Marketing), B.Sc.(Biology)

**Research Interests**: HRM, Quality of Work Life, Change Management, Labor Legislation, Occupational stress & Well-Being, Organizational Development, Work life Balance.

reeta.dms@mnit.ac.in 01412713281

<u>View Detailed Profile</u> Google Scholar Profile

## Dr. Ritika Mahajan

#### **Assistant Professor**

Ph.D.,MBA,BBA

**Research Interests :** Management Education, CSR, and Sustainable Development Strategy , Management Education for Sustainable Development, Qualitative Research.

ritika.dms@mnit.ac.in

View Detailed Profile

Google Scholar Profile Personal Website

## Dr. Shridev Devji

## **Assistant Professor**

Ph.D.(Banking and Finance), MBA(Finance), M.Com.(Human Resource), BBM(Finance), CAIIB(Banking)

Passarch Interests: Financial and non-financial disclosures. Management of Banks and Financial

**Research Interests**: Financial and non financial disclosures, Management of Banks and Financial Institutions, Monetary and Financial sector, Cost Management, Financial Distress.

shridev.dms@mnit.ac.in

View Detailed Profile

Google Scholar Profile

#### Dr. Shweta Sharma

## **Assistant Professor**

Ph.D.(Finance),MBA(Finance),M.A.(Economics),B.A.(Economics (Hons.))

**Research Interests**: Corporate Finance, Risk Management, Financial Markets, Performance management, Project Management, Financial Institutions, Economics and Management, Sustainable Finance.

shweta.dms@mnit.ac.in

View Detailed Profile

Google Scholar Profile

#### Academics

- Programme
- Structure and Curriculum

#### • Time Table

The two-year full-time MBA program is the flagship program of the institute. The program aims to develop social and ethically oriented management professionals equipped to face changes in modern business organizations.

Specifically, the stated program objectives are:

- •To impart skills and knowledge such as to demonstrate the ability to perform as able management professionals
- •To develop students into leaders of the future with abilities to tackle challenges of the modern global business environment
- •To develop future management leaders sensitive to social development and with an eye for opportunities for growth in the international perspective.

With this end in view, the program is designed to include courses of study, seminars, projects, and thesis submission through which a student may develop his concepts and intellectual skills. Faculty members act as curators of knowledge and facilitators for its dissemination rather than just instructors. Multiple co-curricular and extra-curricular events are organized by faculty and students during the academic sessions.

## **Pedagogy**

The institute believes that self-learning is the best means of learning, especially at the post-graduation level, and accordingly, faculty should act as facilitators more than teachers. Teaching is heavily oriented towards case studies, presentations, and assignments. A variety of seminars are organized by faculty and students during the academic sessions.

#### **Facilities**

DMS has well-equipped lecture and seminar halls with state-of-the-art facilities, creating a fine ambience where students hone their business acumen through presentations and seminars. DMS has the privilege of having two mini-auditoriums to conduct lectures, seminars, and paper presentations. The Computer Centre helps DMS harness the role of technology as a critical enabler in all its operations. The department has a rich pool of faculty with years of interdisciplinary research, teaching, and administrative experience. The faculty members at the DMS are equally competent in delivering quality training and learning experience. The faculty members are continuously involved in research and consultancy assignments, and further learning in their areas of expertise to keep them abreast of the latest development in their respective areas and transfer it to the budding managers enrolled in various programs at the DMS. Situated at the heart of the beautiful city of Jaipur, the institute offers abundant opportunities for connectivity. However, most

facilities are available on the campus, including banks, a library, a computer centre, a well-equipped dispensary, etc. All students and faculty live on campus, in student hostels and NIT staff quarters. The peaceful atmosphere of the campus belies the wide range of activities that complement academic life. Students at DMS can access the following amenities-

## Library

The institute has a spacious and well-equipped library run according to an open access system. It has a rich collection of about 1,33,600 volumes of books, periodicals, reports, and reference material. In addition to the books from the main library, books are also issued to students from the book bank. There is a video viewing facility. Many books, periodicals, video cassettes, and CD-ROMs are available. The library is being fully computerized.

## **Computer Centre**

A centralized computing facility of the institute since 1989, the Centre caters to the need of different academic departments and various sections of the institute by managing and providing extensive computing and networking facilities to the institute and facilitating the use of the latest information technology in the institute's teaching, learning, research, and administration.

## **Sports**

Adequate facilities are available for sports and games, and co-curricular activities. The campus is well laid out with roads, electrical installations, water supply, underground drainage system, etc.

#### **Medical Facilities**

A full-fledged medical dispensary is available on campus. A Resident Medical Officer supervises it. The dispensary also has a panel of specialists, including an Ayurvedic Doctor, a Homeopathy Doctor, an Orthopedic Doctor, a Cardiologist, a Gynecologist, and a Paediatrician available to students and the family members of the staff as per a notified schedule.

## **Vivekananda Lecture Theatre Complex(VLTC)**

40+ Rooms of capacity 120 and 6 Rooms of capacity 240 @VLTC are constructed in the VLTC with state of the art facilities for offline and online teaching.

## MNIT Innovation and Incubation Center (MIIC)

MIIC is a Technology Business Incubator (TBI) sponsored by DST-GOI, New Delhi. Its primary objective is to provide a platform for Conceiving, Realizing, Promoting & Nurturing knowledge-based Innovation and Entrepreneurship amongst all aspiring entrepreneurs. MIIC extends incubation support to startups primarily but not limited to the areas of Product or Process design/Re-design, Material or Process innovation, Information & Communications Technology.

#### **Other Facilities**

The institute has multiple cafeterias at various locations within the campus. There are two branches of banks, one each of ICICI Bank Ltd. and SBI, in the campus where students can avail themselves of all banking-related services. There is a Post Office on the campus of MNIT.

## **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## **Journal Publications (176)**

#### 2023

Akshay Patidar, Monica Sharma, Rajeev Agrawal, Kuldip Singh Sangwan, "Antecedents of a Resilient Sustainable Supply Chain", Procedia CIRP Volume: 116 / 558-563 / 2023

K Sharma, S Devji, K Prasad, A Dsouza, "Corporate Governance in India: A Systematic Bibliometric Analysis with TCCM Framework", IUP Journal of Corporate Governance Volume: 22 / 34-66 / 2023 ISBN: 0972-6853

Mahajan, R, Lim, WM, Kumar, S, Sareen, M, "Covid-19 and Management Education: From pandemic to endemic", The International Journal of Management Education Volume: 00 / / 2023

Lim, M.W., Kumar, S., Pandey, N., Verma, D., Kumar, D., "Evolution and trends in consumer behaviour: Insights from Journal of Consumer Behaviour", Journal of Consumer Behaviour Volume: 22 (1) / 217-232 / 2023

Debidutta Pattnaik , M. Kabir Hassan , Arun Dsouza , Aviral Tiwari, Shridev Devji, "Ex-post facto analysis of cryptocurrency literature over a decade using bibliometric technique" , Technological forecasting and social change Volume :189 / / 2023

Aakanksha Kataria, Kumari Rashmi, Mansi Rastogi , "Fostering change-oriented OCBS: an analysis of India s IT talent" , Journal of Asia Business Studies Volume :17(1) / / 2023

Mahajan, R, Kumar, S and Agarwal, M, "Online teaching effectiveness: Lessons from Indian universities during the Covid-19 pandemic" , Global Business and Organizational Excellence

Volume:00 / / 2023

**Projects** 

- Research Projects
- Testing & Consultancy Projects

## **Research Projects**

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Shridev Devji	Catalyzing Economic Development Impact of Pradhan Mantri Mudra Yojana in the States of Rajasthan and Karnataka	ICSSR
2	Dr. Shridev Devji	Development of attention based network for food hygiene management	HEBBARS PTY
3	Dr. Shridev Devji	Perception and Awareness of Organic Products in India	Morehealth Organics
4	Dr. Reeta Singh	An Empirical Investigation of Antecedents and Remedies for Work - Life Balance of Female Healthcare Workers in Rajasthan using Quality Tool(s)	ICSSR, New Delhi
5	Dr. Aakanksha Kataria	A study to understand the challenges and support mechanism for adopting NEP 2020 among Anganwadi teachers in Rajasthan	ICSSR
6	Dr. Monica Sharma	Emerging Avenues if Supply Chain Logistical Drivers for Atma-Nirbhar Bharat	AICTE
7	Dr. Shridev Devji	Design and development of efficient methods for food quality assessment using computer vision.	LUMACHAIN SOLUTION
8	Dr. Ritika Mahajan	Business Models for Circular Economy	United Nations Environme Programme
9	Dr. Divesh Kumar	Diffusion of Environmental Sustainability Innovations in Hotels of Rajasthan State	Indian Council of Social Science Research (ICSSR
10	Dr. Monica Sharma	An empirical investigation of ergonomic interventions in Handicraft Industry in Rajasthan with special reference to Gems and Jewlery Industry	DST, GoI, New Delhi

## **Event Organized**

National Short Term Course on **Finance for Beginners in Digital Era** at Malaviya National Institute of Technology, Jaipur, India from 21-08-2023 to 25-08-2023

National Workshop on **Five-Days Workshop on "BUSINESS ANALYTICS FOR MANAGERS"** at MNIT , Jaipur, India from 12-06-2023 to 16-06-2023

National Short Term Course on **MDP on Sustainability Reporting** at MNIT Jaipur, Jaipur, India from 27-04-2023 to 29-05-2023

National Short Term Course on **Sustainability Ambassadors Programme** at MNIT Jaipur, Jaipur, India from 10-01-2023 to 14-01-2023

National Short Term Course on Emerging Avenues of Supply Chain Logistical Drivers for Atma-Nirbhar Bharat at MNIT, Jaipur, Rajasthan, India from 05-12-2022 to 17-12-2022

National Short Term Course on **Finance For Non Finance Professionals** at MNIT Jaipur, Jaipur, India from 01-08-2022 to 05-08-2022

International Short Term Course on **Research School 2022** at DMS MNIT Jaipur, Jaipur, India from 23-07-2022 to 07-08-2022

International Short Term Course on **6th Annual Research School 2022** at Department of Management Studies, MNIT Jaipur, Jaipur (Rajasthan), India from 23-05-2022 to 07-06-2022

National Symposia on **Tech-O-Thon: Technasia the Hackathon** at MNIT Jaipur, Jaipur, India from 30-04-2022 to 30-04-2022

National Short Term Course on **Entrepreneurship Development Programme** at MNIT Jaipur, Jaipur, India from 28-02-2022 to 04-04-2022

National Workshop on **Training Program for II Sem students of Govt. R.C.Khetan Polytechnic College** at MNIT Jaipur, Jaipur, India from 24-12-2021 to 19-01-2022

International Conference on **ICIEM 2021** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 17-12-2021 to 19-12-2021

#### **Awards & Honours**

"Dr. Monica Sharma", Commendable Contribution in the field of Science & Technology for International Womens Day given by DST, Govt. of Rajasthan

"Dr. Monica Sharma", Member, Inspection Committee for Inspection for Accreditation/ Research Centre Verification of RTU affiliated Institutes given by Rajasthan Technical University

"Dr. Monica Sharma", VC Nominee for Governing Body of Maharishi Arvind Institute of Science & Technology (PGDM) given by Rajasthan Technical University

"Dr. Monica Sharma", VC Nominee for Governing body of Maharishi Arvind Institute of Science and Technology given by Rajasthan Technical University

"Dr. Monica Sharma", VC Nominee for Governing Body of Maharishi Arvind Institute of Science & Technology, Mansarover given by Rajasthan Technical University

"Dr. Monica Sharma", Innovation Ambassador for Innovation Ambassador Training given by MoE, Innovation Cell and AICTE

"Dr. Ritika Mahajan", Selected for "Reporting on the Biodiversity Crisis in India" for Bootcamp given by Land Conflicts Watch

"Dr. Shweta Sharma", Digital Identity Research Initiative (DIRI) Research Fellowship for given by ISB-Hyderabad

"Dr. Ritika Mahajan", Invitation to teach at the United Nations Asian Leadership Academy at Chulalongkorn University for Training Program given by United Nations

"Dr. Ritika Mahajan", Best Paper Award for Research Presented at the International Conference on Rethinking Management Education given by Academy of Value Based Management

#### **Welcome to Department of Mathematics**

#### **Department by the Numbers**

12		
	Faculty	
260		
	Journal Publications	
22		
	Conf. Publications	
9		
	Research Projects	

#### PhD Awarded

#### **About the Department**

Mathematics is an indispensable complement to the fields of engineering, technology and more recently life sciences. The department is constantly evolving with taking up research in new and dynamic areas of pure and applied mathematics since its inception in 1963. The department has faculty members with research interests in the areas of Linear and nonlinear stability analyses of convective flows, Numerical and analytical methods inFluid Dynamics, Computational Methods for Partial Differential Equations, Function Spaces, Hyperspace Topologies, Functional Analysis and Measure Theory, Linear algebra and its applications, Fractional Calculus, Machine Learning, Computational statistics, Bicomplex Analysis, Geometric Function Theory and Mathematical Modeling.

#### Mission

Our Mission is to prepare post-graduate and doctoral students for productive careers in academic by providing an excellent environment for teaching, learning, and research in pure and appliedmathematics, we aim to extend fundamental knowledge skills of mathematics so that students can pursue creative research in order to serve the needs of industry and the scientific community by expanding and contributing towards the knowledge of this incredible subject.

## Vision

Our Vision is to be a recognized leader in Mathematics research and to have a strong impact in our targeted areas of research. Educational Objectives of the Department are to provide outstanding education and research environment through programs that promote integrated knowledge capturing the essence of mathematical methodologies in interdisciplinary fields.

#### **Contact Information**

#### Dr. Vatsala Mathur

Head, Department of Mathematics

Malaviya National Institute of Technology

JLN Marg, Jaipur-302017

hod.maths@mnit.ac.in

## People

Faculty

- Staff
- Research Scholars
- PhD Awarded

## Faculty

#### **Head of Department**

#### Dr. Vatsala Mathur

**Associate Professor** 

Ph.D.(Mathematics), M.Sc.(Mathematics), B.Sc.(Maths(Hons.))

Research Interests: Fluid Dynamics.

vatsalamathurmnit@gmail.com 01412713213

<u>View Detailed Profile</u> Google Scholar Profile

#### **Associate Professor**

## Dr. Ramesh C. Soni Associate Professor

Ph.D.,M.Sc.,B.Sc.

Research Interests: Special Functions, Integral Transform, Fractional Calculus.

drrcsoni@yahoo.com 01412336866

View Detailed Profile

#### **Dr. Santosh Chaudhary**

#### **Associate Professor**

Ph.D.(Mathematics),M. Phil.(Mathematics),M.Sc.(Mathematics),B.Sc.(Phy, Chem, Math),Professional Deiploma(Software Technology and Systems Management)

**Research Interests**: Computational Methods for Partial Differential Equations, Computational Fluid Dynamics (CFD), Computer Programming, System Analysis.

schaudhary.maths@mnit.ac.in 01412713277

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Google Scholar Profile

#### **Assistant Professor**

# Dr. Anubha Jindal

**Assistant Professor** 

Ph.D.(Mathematics), M.Sc.(Mathematics), B.A.(Maths, Economics)

**Research Interests:** Topology, Generalized Metric Spaces.

anubha.maths@mnit.ac.in

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Google Scholar Profile

## Dr. Geetanjali Chattopadhyay

#### **Assistant Professor**

Ph.D.(Mathematics), M.Sc.(Mathematics), B.Sc.(Mathematics)

Research Interests: Fluid Dynamics, Flow stability, Flow in porous channels.

geetanjali.maths@mnit.ac.in

View Detailed Profile

Google Scholar Profile ResearchGate Profile

## Dr. K. Palpandi

#### **Assistant Professor**

Ph.D.(Mathematics), M.Sc.(Mathematics), B.Sc.(Mathematics)

Research Interests: Linear algebra and its applications.

kpalpandi.maths@mnit.ac.in

View Detailed Profile
Google Scholar Profile

#### Dr. Kushal Sharma

#### **Assistant Professor**

Ph.D.(Mathematics), M.Sc.(Mathematics), B.Sc.(Comp. Sc.)

Research Interests: FHD; Fluid Dynamics: Magnetic Nanofluids, Porous Media, Variable Viscosity,

Boundary Layer Flow etc..

kushal.maths@mnit.ac.in View Detailed Profile

Google Scholar Profile

#### Dr. Om P. Suthar

#### **Assistant Professor**

Ph.D.(Mathematics), M.Sc. (Mathematics), B.Sc. (Maths, Stats, Phy.)

**Research Interests:** Linear and nonlinear stability analyses of convective flows, Numerical and analytical methods in Fluid Dynamics.

ompsuthar.maths@mnit.ac.in 0141000

View Detailed Profile

Google Scholar Profile

#### Dr. Priyanka Harjule

## **Assistant Professor**

Ph.D.(Applied Mathematics), M.Sc.(Mathematics), B.Sc.(PCM)

Research Interests: Fractional Calculus, Machine Learning, Computational statistics.

priyanka.maths@mnit.ac.in 01412715035

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Google Scholar Profile ResearchGate Profile Personal Website

#### Dr. Ritu Agarwal

#### **Assistant Professor**

Ph.D.(Mathematics), M. Phil.(Mathematics), M.Sc.(Mathematics), B.Sc.(PCM), Sr. Secondary (Math Science) **Research Interests**: Bicomplex Analysis, Geometric Function Theory, Fractional Calculus, Mathematical Modeling.

ragarwal.maths@mnit.ac.in 01411000000

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Google Scholar Profile ResearchGate Profile Personal Website

Dr. Sanjay Bhatter

**Assistant Professor** 

Ph.D.(Mathematics), M.Sc.(Mathematics), B.Sc.(Mathematics, Physics, Chemistr)

Research Interests: Special Functions, Fractional Calculus, Integral Transform, Fractional transforms.

sbhatter.maths@mnit.ac.in 01412713298

<u>View Detailed Profile</u> Google Scholar Profile

Dr. Varun Jindal

**Assistant Professor** 

Ph.D.(Mathematics), M.Sc.(Mathematics), B.Sc.(PCM)

**Research Interests:** Set-Theoretic Topology, Topology and Functional Analysis.

vjindal.maths@mnit.ac.in 01412000000

<u>View Detailed Profile</u> Google Scholar Profile

**Facilities** 

The Institute extends a wide range of activities and facilities to all the students in order to foster a positive, peaceful and lively learning environment. Students at department of mathematics can access the following facilities-

## Library

The institute has a spacious and well-equipped library run according to an open access system. It has a rich collection of about 1,33,600 volumes of books, periodicals, reports, and reference material. In addition to the books from the main library, books are also issued to students from the book bank. There is a video viewing facility. Many books, periodicals, video cassettes, and CD-ROMs are available. The library is being fully computerized.

## **Computer Centre**

A centralized computing facility of the institute since 1989, the Centre caters to the need of different academic departments and various sections of the institute by managing and providing extensive computing and networking facilities to the institute and facilitating the use of the latest information technology in the institute's teaching, learning, research, and administration.

## **Sports**

Adequate facilities are available for sports and games, and co-curricular activities. The campus is well laid out with roads, electrical installations, water supply, underground drainage system, etc.

#### **Medical Facilities**

A full-fledged medical dispensary is available on campus. A Resident Medical Officer supervises it. The dispensary also has a panel of specialists, including an Ayurvedic Doctor, a Homeopathy Doctor, an Orthopedic Doctor, a Cardiologist, a Gynecologist, and a Paediatrician available to students and the family members of the staff as per a notified schedule.

## **Vivekananda Lecture Theatre Complex(VLTC)**

40+ Rooms of capacity 120 and 6 Rooms of capacity 240 @VLTC are constructed in the VLTC with state of the art facilities for offline and online teaching.

#### **Other Facilities**

The institute has multiple cafeterias at various locations within the campus. There are two branches of banks, one each of ICICI Bank Ltd. and SBI, in the campus where students can avail themselves of all banking-related services. There is a Post Office on the campus of MNIT.

#### **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## Journal Publications (260)

#### 2023

Shyamsunder , S. Bhatter , K. Jangid , A. Abidemi , K.M. Owolabi , S.D. Purohit, "A new fractional mathematical model to study the impact of vaccination on COVID-19 outbreaks" , Decision Analytics Volume :Volume 6, / / 2023

Priyanka Harjule, Mohd. Tokir Manva, Tanuj Mehta, Shivam Gurjar and Basant Agarwal, "Analysing Misinformation Sharing Amongst College Students in India During COVID-19 India During COVID-19", Procedia computer science Volume: 218 / / 2023

Urvashi Purohit Sharma, Ritu Agarwal and Kottakkaran Sooppy Nisar, "Bicomplex two-parameter Mittag-Leffler function and properties with application to the fractional time wave equation", Palestine Journal of Mathematics Volume: 12 / 462-481 / 2023 ISBN: 2219-5688

A. Bansal and Om P. Suthar, "Combined Effect of Temperature Modulation and Rotation on the Onset of Darcy-Bonard Convection in a Porous Layer Using the Local Thermal Nonequilibrium Model", Transport in Porous Media Volume: 147 / 125 141 / 2023

Santosh Chaudhary, Kiran Kunwar Chouhan, "Darcy-Forchheimer flow of Prandtl-Eyring nanofluid subjected to a Riga plate of varying thickness along with Brownian diffusion, thermophoresis and non-uniform heat source/sink effects", Numerical Heat Transfer, Part A: Applications Volume:84 / 732-759 / 2023

Akshay Kumar and Varun Jindal, "**Dual of an extended locally convex space**", Journal of Mathematical Analysis and Applications Volume: 527 / 127474 / 2023

# N. Vijay, Kushal Sharma, "Dynamics of stagnation point flow of Maxwell nanofluid with combined heat and mass transfer effects: A numerical Projects

- Research Projects
- Testing & Consultancy Projects

## **Research Projects**

Project

#	Investigator	Title of the project	Funding Agency
1	Dr. Priyanka Harjule	ICESat-2 based Ground photons retrieval in urban areas by using deep learning algorithm	ISRO-RACS
2	Dr. Priyanka Harjule	Artificial intelligence (AI)-based model to assist radiologists in silicosis screening using chest X-rays	Directorate of Specially Abled Persons. Government of Rajasthan
3	Dr. Priyanka Harjule	Study impact on members of Self Help Groups (SHGs) in Rajasthan through MIS data with applications of data analytics techniques	Rajasthan Grameen Aajeevika Vikas Parishad (RGAVP), Govt. of Rajasthan
4	Dr. Priyanka Harjule	Artificial Intelligence model for screening and staging pneumoconiosis using chest X-rays	SERB VRITIKA
5	Dr. Priyanka Harjule	Supporting collegiate youth and teachers by integrating meaningful analytic data with massive open online courses	H.G. Foundaion
6	Dr. Varun Jindal	Study of Various Structures of Spaces of Continuous Functions	National Board for Higher Mathematics (NBHM) Department of Atomic Energy Govt of India
7	Dr. Ritu Agarwal	A study of generalized fractional calculus operators for the certain extended special functions	RTU (ATU) TEQIP-III
8	Dr. Ritu Agarwal	Application of fractional calculus in the study of dynamics of cytosolic calcium ion in astrocytes	National Board of Higher Mathematics
9	Dr. Ritu Agarwal	Bicomplex Integral Transforms and their Applications in physical sciences and engineering	Institutional research project

**Event Organized** 

National Short Term Course on **DATA DRIVEN ANALYTICS WITH MACHINE LEARNING** at MNIT , Jaipur, ndia from 12-06-2023 to 16-06-2023

International Workshop on International Workshop on Computing Special Functions and Their Applications at MTTF, MNITJ, SVNIT, Jaipur, Surat, India from 24-05-2023 to 30-06-2023

International Workshop on **Teacher Enrichment Workshop on "Complex Analysis and Geometry"** at MNIT, Jaipur, India from 12-12-2022 to 17-12-2022

International Conference on **Recent Advances in Mathematical Fluid Dynamics** at MNIT Jaipur, Jaipur, India from 02-12-2022 to 04-12-2022

National Workshop on **Computational Mathematics using MATLAB** at MNIT, Jaipur, India from 03-11-2022 to 04-11-2022

International Workshop on **Trends in Analysis and Topology** at MNIT Jaipur, Jaipur, India from 08-09-2022 to 12-09-2022

National Short Term Course on **Short term course on Machine Learning for non coders** at MNIT , Jaipur, India from 04-07-2022 to 08-07-2022

International Workshop on **Advanced Numerical Techniques for Differential Equations** at MNIT, JAIPUR, India from 06-06-2022 to 10-06-2022

National Short Term Course on **Application of Remote Sensing and GIS in Urban Planning** at MNIT Jaipur, Jaipur, India from 11-03-2021 to 15-03-2021

National Workshop on **Mental health and emotional wellbeing** at MNIT and IIIT Kota, Jaipur, India from 14-09-2020 to 18-09-2020

National Short Term Course on **Software Tools & Techniques for Scientific Publications: ROOT, GNU Plot, GeoGebra** at MNIT, Jaipur, India from 04-09-2020 to 08-09-2020

National Short Term Course on **Technical Writing using LaTex** at MNIT Jaipur, Jaipur, India from 20-12-2019 to 24-12-2019

#### **Awards & Honours**

"Dr. Ritu Agarwal", Full member for Research given by Organization for Women in Science for the Developing World (OWSD), a unit of UNESCO

"Dr. Geetanjali Chattopadhyay", SERB International Research Experience (SIRE) for overseas research exposure given by DST

"Dr. Ritu Agarwal", Young researcher award for 2nd Global Conference on EMERGING TRENDS IN RESEARCH & DEVELOPMENT given by The International Journal of Innovative Research & Growth (IJIRG) & Jaipur National University

"Dr. Priyanka Harjule", Appreciation certificate for Womens day (Women in science) given by Department of Science and Technology(DST), Government of Rajasthan

"Dr. Ritu Agarwal", Appreciation certificate for wonder woman in academics and research for Womens day given by Vivekanand Global University Jaipur

"Dr. Geetanjali Chattopadhyay", International Travel Support for presenting research at the APS March Meeting, 2018 in Los Angeles, USA given by Science & Engineering Research Board (SERB), Department of Science & Technology (DST), India

"Dr. Anubha Jindal", NBHM Post Doctorate Fellowship for Post-Doctoral Research given by National Board for Higher Mathematics, Department of Atomic Energy, GOI

"Dr. Varun Jindal", Distinction in Doctoral Research for Research given by IIT Delhi

"Dr. K. Palpandi", CSIR-JRF for Qualifying CSIR UGC NET given by CSIR

"Dr. Geetanjali Chattopadhyay", Merit-Cum-Means Scholarship for being one of the top 25% students in M.Sc 2nd year given by Indian Institute of Technology Madras

## **Welcome to Department of Mechanical Engineering**

## **Department by the Numbers**

33	3
	Faculty
14	453
	Journal Publications
10	013
	Conf. Publications

80

## Research Projects

210

#### PhD Awarded

**Latest News** 

#### **About the Department**

Welcome to the Department of Mechanical Engineering at Malaviya National Institute of Technology Jaipur, where experienced faculty and highly motivated students - supported by a dedicated staff experience a unique engineering education. The Department offers academic programmes at three levels leading to Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), and Doctor of Philosophy (Ph.D.) degrees. In addition, continuing education programmes in specialized areas are offered on a regular basis for industry professionals and academic staff from other colleges. An extremely dynamic and large faculty (current strength of about 25), and a well experienced support staff, give the Department a breadth of research focus and wide range of technical expertise. Our 25 odd full time experienced faculty members have a passion for teaching and an avowed commitment to research and development. Majority of the faculty holds doctoral degrees from reputed institutes. Apart from teaching, the faculty is engaged in diverse research areas with several faculty members even serving as guest editors of various reputed journals. They publish their work in highly reputed journals and present their work at prestigious national and international conferences. We are continually striving to improve the quality of our programs by finding new ways of curriculum methods. structuring our and exploring delivery new We provide our students opportunities to engage in experiments, design work, project work, industrial training, seminars, and team work to enhance the learning process that is so vital for a holistic engineering education. They develop skills of inquiring and exploring new ideas on their own. In essence, they are well prepared for the life-long learning that is vital for an enriching career in engineering. Our students develop an ability to think, are able to innovate, and acquire a strong foundation technical knowledge. in If you are a prospective undergraduate or graduate student; a faculty or staff member; alumni; a recruiter from industry or government; or a potential donor; you'll find this department a great place. Please do not hesitate to contact us for any further details.

#### Vision

To create a center of international standard for imparting education in Mechanical Engineering and conducting research at the cutting edge of technology to meet the current and future challenges of technological development.

#### Mission

To develop an excellent teaching, learning & research ecosystem for producing leading technocrats, innovators, and entrepreneurs in the field of Mechanical Engineering.

#### **Contact Information**

## **Prof. Himanshu Chaudhary**

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## People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

#### Faculty

#### **Head of Department**

#### **Prof. Himanshu Chaudhary**

#### **Professor**

Ph.D.(Machine Design ), M. Tech. (Solids Mechanics & Design), B.E. (Mech. Eng. )

**Research Interests:** Multibody Dynamics, Dynamic Balancing and Optimization of mechanisms including Robotic Systems, Kinematics and Dynamics of Machinery, Agricultural Machinery design.

hchaudhary.mech@mnit.ac.in 09549654498

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Google Scholar Profile

BibBase Profile

Personal Website

## **Professor-HAG**

## Prof. A. P. S. Rathore

#### **Professor-HAG**

Ph.D.(Operations Management), MBA, B.E. (Mechanical Engineering)

**Research Interests:** Supply Chain Management, Operations Research, Productivity Modeling, New Product Development Strategies, Operations Management.

apsr100@yahoo.co.in 01412352545
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Google Scholar Profile ResearchGate Profile

## **Prof. Dilip Sharma**

#### **Professor-HAG**

Ph.D.(Mechanical Engineering), M.E.(Thermal Engineering), B.E.(Mechanical Engineering)

**Research Interests**: Alternate Fuels and Emissions, Non Conventional Sources Of Energy, Hydrogen Energy, Combustion in IC Engines, Cogeneration/ Trigeneration system, Biofuels, Combustion Generated Emission, I.C. Engine and Alternative fuels, Solar thermal systems.

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#### Prof. G. S. Dangayach

## **Professor-HAG**

Ph.D.(Industrial Engineering), M. Tech. (Production Engg), B.E. (Mech Engg)

**Research Interests**: Total Quality Management, Operation Research, Lean manufacturing, Advanced Manufacturing Technology, Performance Measurement, Optimization, supply chain Management, Six Sigma, Agile Manufacturing, Manufacturing Strat, Sustainable Manufacturing, Supply Chain Management, Supply Chain Quality.

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#### **Prof. Jyotirmay Mathur**

#### **Professor-HAG**

Ph.D.,M.Tech.,B.E.

**Research Interests**: Energy efficiency in buildings, Passive cooling systems, Renewable energy and energy policy modelling, Development of codes and standards, Low energy cooling, Thermal comfort in buildings, Thermal energy storage.

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## Prof. M. P. Poonia (On Deputation)

**Professor-HAG** 

Ph.D.,M.E.,B.E.

Research Interests:.

mppoonia@ 01412713180

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#### Prof. Rakesh Jain

#### **Professor-HAG**

Ph.D.(Industrial Engineering), M.E.(Industrial Engg.), B.E.(Mechanical Engineering)

**Research Interests**: Supply Chain Management, Lean manufacturing, New Product Development, Strategic Management, Total Quality Management.

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## <u>View Detailed Profile</u> Google Scholar Profile

#### **Professor**

## Prof. G. D. Agarwal

#### **Professor**

Ph.D.(Energy Recovery From MSW),M.Tech.(Thermal Engineering),B.E.(Mechanical Engieering) **Research Interests**: Solar thermal systems and energy aspects, Refrigeration and Air conditioning systems, Application of Nano Materials in Solar thermal and RAC systems, Nanofluids Technology, Renewable energy and energy policy modelling, Solar Energy, Solid Waste Management, Refrigeration & Air conditioning.

gdagarwal.mech@mnit.ac.in 01412713326 View Detailed Profile Google Scholar Profile

## **Prof. Murari Lal Mittal**

#### **Professor**

Ph.D.(Industrial Engineering), M.E.(Production Engineering), B.E.(Mechanical Engineering)

**Research Interests**: Operations Management, Project Management and Scheduling, Multiagent Systems.

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Google Scholar Profile

#### Prof. Nirupam Rohatgi

#### **Professor**

Ph.D.(Mechanical Engg.), M. Tech. (Energy Studies), B. Tech. (Mechanical)

**Research Interests**: CFD of Natural Convection Flows, Transient Analysis of Vapour Compression Systems, Thermal Analysis of Solar Stills.

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Google Scholar Profile

#### Prof. T. C. Gupta

#### **Professor**

Ph.D.(Design Engineering), M.E.(Design Egnieering)

**Research Interests:** Non-linear Rotor Dynamics, Human Body Vibrations.

tcgmnit@gmail.com 01412713560

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Google Scholar Profile

#### **Associate Professor**

#### Dr. Amar Patnaik

#### **Associate Professor**

Ph.D.(Mechanical Engineering), M.Tech. (Production Engineering), MBA (Marketing), B.Tech. (Mechanical Engineering)

**Research Interests**: Composite Materials, Tribology, Modelling And Simulation, Biomaterials, Metal Casting.

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# Mr. Amit Pancharya

**Associate Professor** 

M.Tech.(Applied Mechanics), B.E.(Mechanical Engineering)

Research Interests: Manufacturing Technology. apanchariya.mech@mnit.ac.in 01412713330

View Detailed Profile

#### Dr. Dinesh Kumar

#### **Associate Professor**

Ph.D.(Mech. Engg.), M.E.(Mech. Engg.), B.E.(Mech. Engg.)

**Research Interests**: Computational method for linear/non-linear problems, Fracture Mechanics, Multiscale Modelling and Simulation of Nanocomposites, Finite Element Method.

vermadinesh2002@gmail.com 01412713330

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Google Scholar Profile

## Dr. Harlal Singh Mali

#### **Associate Professor**

Ph.D.(Mech. Engg.), M.E.(CIM), B.E.(Mech. Engg.)

**Research Interests**: Advanced Manufacturing Technologies, Micro Manufacturing, Composite / Ceramic Materials, Product Development including Low Cost Prosthetic, CAE/CAM, Design Thinking.

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#### Dr. Jinesh Kumar Jain

#### **Associate Professor**

Ph.D.(Production & Industrial Engineering), M. Tech. (Manufacturing System Engineering), B.E. (Mechanical Engineering)

**Research Interests**: Industrial Automation, Non Traditional Machining, Joining and Additive Manufacturing, Additive Manufacturing, Welding Technology, Biomaterials, Lean Manufacturing, Operation Management, Manufacturing Strategy, SUSTAINABLE DEVELOPMENT.

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## Dr. M. L. Meena

#### **Associate Professor**

Ph.D.(Industrial Engineering), M.Tech. (Manufacturing System Engg.), MBA(HRM), B.E. (Mechanical Engineering)

**Research Interests**: Industrial Engineering, Ergonomics, Productivity Engineering, Materials Management, Operations Planning and Control, Manufacturing Technology, Work System Design, Operation Research.

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#### Dr. Monica Sharma

#### **Associate Professor**

Ph.D.(Industrial Engineering), MBA(Production & Operations Mgmt.), B.E.(Mechanical)

**Research Interests**: Industrial Engineering, Lean manufacturing, Materials Management, Operations Management, Operation Research, Total Quality Management, Manufacturing Excellence, Sustainable Manufacturing, Six Sigma.

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## Dr. Rajeev Agrawal

## **Associate Professor**

Ph.D.(Industrial Engineering ), M.E.(Production Engineering ), B.E.(Mechanical Engineering )

**Research Interests:** Industrial Engineering, Operations Management, Sustainable Manufacturing, Industrial Automation, Lean Manufacturing, Life Cycle Assessment and Sustainability Assessment, Six Sigma.

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#### **Assistant Professor**

#### Dr. Amit Arora

#### **Assistant Professor**

Ph.D.(Mechanical Engineering), M.Tech.(Thermal Engineering), B.Tech.(Mechanical Engineering)

Research Interests: Experimental Heat Transfer, Computational Fluid Dynamics, Computational Heat

Transfer, Design optimization of heat exchange modules, Heat transfer enhancement, Electronic cooling systems.

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View Detailed Profile

Google Scholar Profile

#### Dr. Amit Kumar Singh

#### **Assistant Professor**

Ph.D.(Mechanical Engg), M.Tech.(Manufacturing Systems Eng), B.Tech.(Mechanical Engg)

**Research Interests:** BioMechanics, Additive Manufacturing, Rapid Tooling, CAD/CAM/CAE.

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#### Dr. Anoj Meena

#### **Assistant Professor**

Ph.D.(Tribology), M.Tech.(Production Engineering), B.E.(Mechanical Engineering)

Research Interests: NON CONVENTIONAL MACHINING, Composite Materials, Tribology.

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Google Scholar Profile

#### Dr. Anup Malik

## **Assistant Professor**

Ph.D.(Mechanical Engineering), M.E.(Mechanical Engineering), B.Tech.(Mechanical Engineering) **Research Interests:** Advance Manufacturing Technology, Hybrid Machining Processes, Composite materials, Biomaterials, Composite Materials, Coatings, Optimization Techniques, Surface Engineering.

anup.mech@mnit.ac.in View Detailed Profile Google Scholar Profile

## Dr. Gulab Pamnani

## **Assistant Professor**

Ph.D.(Mechanical), M.Tech.(Mechanical), B.E.(Mechanical)

**Research Interests:** Finite Element Analysis, Stress Analysis, Fracture Mechanics, Finite Element Methods, Mechanics of Solids and Composites, Non Destructive Testing Techniques.

gulab.mech@mnit.ac.in View Detailed Profile Google Scholar Profile

### Dr. Gunjan Soni

#### **Assistant Professor**

Ph.D.(Mechanical Engineering), M.Tech.(Industrial Engineering), B.E.(Mechanical Engineering) **Research Interests:** Predictive maintenance, Supply Chain Management, Artificial Intelligence in Manufacturing Systems.

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#### Dr. Manish Kumar

#### **Assistant Professor**

Ph.D.(Mechanical Engineering), B.E.(Mechanical Engineering)

**Research Interests**: CFD, Immersed Boundary Method, High Performance Computing, Numerical Algorithms, Moving Boundary Flows, Heat Transfer Enhancement, FSI.

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View Detailed Profile
Google Scholar Profile

## Dr. Manjinder Singh

## **Assistant Professor**

Ph.D.(Thermo-Fluids), M.Tech.(Thermo-Fluids)

**Research Interests**: Fluid mechanics, Heat Transfer Enhancement, Fluid Dynamics, FHD; Fluid Dynamics: Magnetic Nanofluids, Porous Media, Variable Viscosity, Boundary Layer Flow etc., Fluid Structure Interaction.

manjinder.mech@mnit.ac.in View Detailed Profile

Google Scholar Profile

#### Dr. Mukesh Kumar

#### **Assistant Professor**

Ph.D.(Mechanical Engineering), M. Tech.(Industrial Engineering and Management), B.E.(Mechanical Engineering (spl. Manufacturing Process & Automation))

**Research Interests**: Composite Materials / Nano-composite Materials, Ceramic Materials, Material Science, Tribology, DOE.

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#### Dr. Naresh Kumar Raghuwanshi

#### **Assistant Professor**

Ph.D.(Mechanical Engineering), M.Tech. (Stress and Vibration Analysis), B.E. (Mechanical Engineering)

Research Interests: Vibration Analysis, Experimental Modal Analysis, Experimental Stress Analysis, Fault Diagnosis, Noise and Vibration Control.

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Google Scholar Profile Biosketch

#### Dr. Nikhil Sharma

#### **Assistant Professor**

Ph.D.(Fluid and Thermal Sciences),M.Tech.(Thermal Engineering (CFD & HT)),B.Tech.(Mechanical Engineering)

**Research Interests**: Computational Fluid Dynamics (CFD), Laser Diagnostic Techniques, Combustion Generated Emission, Renewable Fuels, Phase Doppler Interferometry for spray characterization, I C Engine.

nikhil.mech@mnit.ac.in

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Google Scholar Profile Personal Website

#### Dr. Pankaj Kumar Gupta

#### **Assistant Professor**

Ph.D.(Manufacturing Technology), M.E.(Mechanical Engineering (P&I)), B.E.(Prod. & Ind. Engineering) **Research Interests:** Advance Manufacturing Technology, Hybrid Machining Processes, Composite materials, Quality Management, Micro Manufacturing, Sustainable Manufacturing.

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#### Dr. Ram Dayal

#### **Assistant Professor**

Ph.D.(Mechanical Engg.),M.Tech.(Thermal Engg.),B.E.(Mechanical Engineering)

**Research Interests**: Additive Manufacturing, Computational Fluid Dynamics (CFD), Heat Transfer Enhancement, Numerical and analytical methods in Fluid Dynamics, Two-phase flow and heat transfer.

ramdayal.mech@mnit.ac.in

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Google Scholar Profile

#### Dr. Tapas Bajpai

#### **Assistant Professor**

Ph.D.(Manufacturing Engineering), M.E.(Production Engineering), B.E.(Mechanical Engineering)

Research Interests: Finite Element Analysis, Computational Welding Mechanics, Welding Technology.

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Facilities

Major Equipments available in Mechanical Engineering Department

## **Central Workshop**

- 1. Welding Shop
- 2. Foundry Shop
- 3. Machining Shop
- 4. Fitting Shop

For more details Click here.

## **Production Engineering Labs**

- 1. Tribology & Advanced Composite Lab
- 2. Advance Casting Lab
- 3. CAD/CAE Lab
- 4. Advance Manufacturing Lab
- 5. Mechatronics Lab
- 6. Metal Cutting Lab

## **Thermal Engineering Labs**

- 1. Refrigeration & Air Conditioning Lab
- 2. Automobile Engineering Lab
- 3. Heat Transfer Lab
- 4. I. C. Engine Lab
- 5. Solar Energy Lab

## **Design Engineering Labs**

- 1. Computer Lab
- 2. Mechanical Vibration Lab
- 3. Metrology & Instrumentation Lab
- 4. Dynamics of Machine Lab

## **Industrial Engineering**

- 1. Work System Design Lab
- 2. Ergonomics Lab
- 3. Industrial & System Engineering Lab

**Publications** 

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## **Journal Publications (1453)**

## 2023

Shashi Ranjan Pathak, Pawan Sharma, Harlal Singh Mali, Anup Malik, "Optimization of machining parameters during milling on glass fiber-reinforced textile composite", Optimization of machining parameters during milling on glass fiber-reinforced textile composite Volume: 6 / 1-13 / 2023 ISBN: 25208179

Kumar, A., Bairwa, R.C., Jain, R., Mishra, Y., Meena, M.L., "A Bibliometric Analysis on Smart Farming Techniques", Emerging Trends in Mechanical and Industrial Engineering Volume: 00 / / 2023

Tejendra Singh Singhal, Jinesh Kumar Jain, Manoj Kumar, Vishal Bhojak, Kuldeep Kumar Saxena, Dharam Buddhi, Chander Prakash, "A comprehensive comparative review: welding and additive manufacturing", International Journal on Interactive Design and Manufacturing (IJIDeM) (ESCI) Volume: 16 / 1-15 / 2023

Abdul Wahab Hashmi a, Harlal Singh Mali a, Anoj Meena a, Kuldeep K. Saxena b, Shadab Ahmad c, Manoj Kumar Agrawal d, Binnur Sagbas e, Ana Pilar Valerga Puerta f, Muhammad Ijaz Khan g, "A comprehensive review on surface post-treatments for freeform surfaces of bio-implants", Journal of Materials Research and Technology Volume :23 / 4866-4908 / 2023 ISBN: 22387854

Sameer Kumar, Yogesh Marawar, Gunjan Soni, Vipul Jain, Anand Gurumurthy, Rambabu Kodali, "A hybrid approach to enhancing the performance of manufacturing organizations by optimal sequencing of value stream mapping tools", International Journal of Lean Six Sigma Volume :00 / 0-0 / 2023 ISBN: 00

**Projects** 

- Research Projects
- Testing & Consultancy Projects

## **Research Projects**

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Rajeev Agrawal	Digital supply Chain and Logistics 4.0	AICTE-ATAL
2	Dr. Rajeev Agrawal	Development of Artificial intelligence enabled sustainable health care waste management system in India	Indian Council of Social Scienc Research
3	Dr. M. L. Meena	Measurement of Musculoskeletal Disorders among Carpet Weavers and Ergonomic Intervention of Carpet Weaving Hand Tools	SERB, DST New Delhi
4	Dr. Harlal Singh Mali	Optimization study for Vacuum Assisted Compression Molding and Vacuum Assisted Resin Transfer Molding Process for Contoured Composites.	DMSRDE, DRDO
5	Dr. Amar Patnaik	Design and Demonstration of Empty and Foam Filled Honeycomb Structures for Energy Absorption During Crash/Impact	ISRO Regional Academic Center for Space
6	Dr. Amar Patnaik	Development of ultra high sub micron Ievel measurement facility for coefficient of thermal expansion lbr dimensionalty stable composite structures	ISRO Regional Academic Center for Space
7	Dr. Amar Patnaik	Development and characterization of high-temperature wear and corrosion resistance high entropy alloy (HEA) for airborne parts and turbine engine blade	SPARC-MHRD Govt. of India
8	Dr. M. L. Meena	Ergonomic Assessment and Intervention Design for the Improvement of Occupational Health of Rural Handicraft Workers	The Institute of Engineer(s) Indi Kolkata
9	Dr. M. L. Meena	A Study of Ground Water Level and Increasing Borewell Water Level of UBA Villages in Jaipur District	WSSO, Govt. of Rajasthan
10	Dr. Amit Arora	Thermo-mechanical characterization of lac blends and development of equipment for partial mechanization of bangle making process	District Industries and Commerc Centre - Jaipur, Government of Rajasthan
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#### Patents:

"3D Metallic Printer", Dr. Pankaj Sonia, Dr. Jinesh Kumar Jain , Reg.No. 202311040809 A [Controller General of Patents, Designs & Trade Marks, Govt. of India] Dt.21-07-2023

"ORTHOSIS FOR CLUBFOOT (CTEV) CORRECTION AND MAINTENANCE BASED ON PONSITI METHOD", Dr Harlal Singh Mali , Reg.No. 18272822 [USPTO (United States Patent and Trademark Office)] Dt.18-07-2023

"A NON-CIRCULAR GEAR ARRANGEMENT FOR HUMAN KNEE JOINT", Himanshu Chaudhary, Aditya Singh, Amit Jain , Reg.No. 202311014839 [IPO New Delhi] Dt.06-03-2023

"Fixture attachment for the conventional lathe to remove exit pinhole defect in friction stir process", Dr. Jinesh Kumar Jain, Vishal Bhojak, Tejendra Singh, Reg.No. 202311013839 [Controller General of Patents, Designs & Trade Marks, Govt. of India]

Dt.01-03-2023

"EDM Assisted Centreless Grinding Machine for grinding lesser Stiff Cylindrical Components", Dr. Harlal Singh Mali, Prof. APS Rathore, Mahendra Singh Shekhawat, Arvind Rathore, Sagar Kartik, Reg.No. 419268 and 201611027415 [Controller General of Patents, Designs & Trade Marks (CGPDTM)]

Dt.25-01-2023

"Design Patent on CLUBFOOT CORRECTION ORTHOSIS", Shamsher Singh and Dr Harlal Singh Mali, Reg.No. 377854-001 [Controller General of Patents, Designs & Trade Marks (CGPDTM)] Dt.23-01-2023

**"Foot Controlled Driving System in Vehicles"**, Dr. Jinesh Kumar Jain, Mr. Tejendra Singh , Reg.No. 202211076404 [Controller General of Patents, Designs & Trade Marks, Govt. of India] Dt.06-01-2023

"Flexible Push-Pull Weeder Tool for Manual Agriculture Weeding", Dr. M. L. Meena, Dr. R. Jain, Prof. G.S. Dangayach, Reg.No. 202211061753A [The Patent Office Journal] Dt.30-10-2022

#### **Event Organized:**

## **Awards & Honours:**

"Dr. Naresh Kumar Raghuwanshi", Best Paper Award for ICMech-REC-2023 given by NIT Warangal

"Dr. Amit Arora", Best Paper Award for International Conference in Fluid, Thermal and Energy Systems (ICFTES'22), NIT Calicut, India given by Convener, International Conference in Fluid, Thermal and Energy Systems (ICFTES'22), NIT Calicut, In

"Dr. Amit Arora", Best Paper Award for International Conference on Thermo-Fluids and System Design (ICTFSD 2022) given by Convener, International Conference on Thermo-Fluids and System Design (ICTFSD 2022)

"Dr. Amit Arora", Best Paper Award for 5th International Conference on Emerging Trends in Mechanical & Industrial Engg. (ICETMIE 2022) given by Convener, International Conference on Emerging Trends in Mechanical & Industrial Engineering

"Dr. Monica Sharma", Commendable Contribution in the field of Science & Technology for International Womens Day given by DST, Govt. of Rajasthan

"Dr. Pankaj Kumar Gupta", First Position for Hindi Prshanottari (Vigyan and Abhiyantriki) given by MNIT

"Dr. Jinesh Kumar Jain", Honorary Adjunct Senior Research Scientist for Neurolabs international given by DANA Brain Health Institute, Iran

"Dr. Jinesh Kumar Jain", Member for Board of Studies given by University College of Engineering, Banswara

"Dr. Monica Sharma", Member, Inspection Committee for Inspection for Accreditation/ Research Centre Verification of RTU affiliated Institutes given by Rajasthan Technical University

"Dr. Amar Patnaik", Outstanding Teacher Award (PG) for given by MNIT Jaipur

"Dr. Pankaj Kumar Gupta", Second Position for Hindi Prashanottari (Samanya and Prashasnik) given by MNIT

"Dr. Pankaj Kumar Gupta", Second Position for Hindi Ashu Bhashan given by MNIT

Welcome to Department of Metallurgical and Materials Engg:

#### **Department by the Numbers**

14	
	Faculty
229	
	Journal Publications
100	
	Conf. Publications

## Research Projects

31

#### PhD Awarded

#### **About the Department**

Department of Metallurgical and Materials Engineering is one of the oldest department established in 1965. The department offers B.Tech, M.Tech and Ph.D programmes in all frontiers areas globally. The basic motto of department is to provide quality education through its highly qualified and experienced faculty members. The faculty is continuously motivated to keep abreast with state-of-the-art

Alumni of this department hold important position in academia, R&D organizations and industries in India as well as international level. Students of this department are certain to have bright career prospects in India as well as globally due to recent ambitious growth plans of ferrous and nonferrous sectors, and great quest for high-tech materials worldwide. A combination designed to provide a foundation for a lifetime of professional and personal development. With these objectives in mind the department has also formed the Metallurgical and Materials Engineering Students Society known as METMES. Our students also show their talent in co-curricular and extra-curricular activities.

#### **Vision**

To establish a centre for imparting Metallurgical and Materials Engineering education of international standards and conducting progressive and innovative research to meet the current and future challenges of technological development.

#### Mission

To provide Metallurgical and Materials Engineering manpower for meeting the current and future demands of the Metallurgical and Materials Engineering industry, research organization and academic institutions by imparting quality educations.

#### **Contact Information**

## **Prof. Upender Pandel**

Head, Department of Metallurgical and Materials Engineering
Malaviya National Institute of Technology

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## People

- Faculty
- Staff
- Research Scholars
- PhD Awarded

#### **Faculty**

#### **Head of Department**

## **Prof. Upender Pandel**

**Professor-HAG** 

Ph.D.(Metallurgical Engineering), M.E.(Metallurgical Engineering), B.E.(Metallurgical Engineering)

**Research Interests**: Metal Casting, Extractive Metallurgy, Materials Science.

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View Detailed Profile

Google Scholar Profile

#### **Professor**

## Prof. Rajendra Kumar Goyal

#### **Professor**

Ph.D.(Met. Engineering & Mater. Sci.), B.E. (Metallurgical Engineering)

**Research Interests**: Nanomaterials, Polymeric materials, Advanced Composites, Structure-Properties Correlation, Biomaterials, Testing and characterization of materials, Development of advanced materials for electronics (PCB, microwave substrate, EMI/RF shielding etc.) and tribological applications, Nanocomposites.

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Google Scholar Profile Personal Website

#### **Assistant Professor**

#### Dr. Abhishek Tripathi

#### **Assistant Professor**

Ph.D.(Metallurgical & Materials Eng.), B. Tech. (Metallurgical & Materials Eng.)

**Research Interests:** Characterization of materials, Crystallographic texture, Thermomechanical processing of metals, Mechanical behavior of materials, Physical metallurgy.

abhishek.meta@mnit.ac.in

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Google Scholar Profile Personal Website

#### Dr. Ajaya Kumar Pradhan

#### **Assistant Professor**

Ph.D.(Metallurgical & Materials Engg), M.Tech. (Materials & Metallurgical Engg), B.E. (Metallurgical & Materials Engg)

**Research Interests:** Composite Materials, Corrosion and Surface Coatings, Tribology, Metal Casting.

ajaya.meta@mnit.ac.in View Detailed Profile Google Scholar Profile

## Dr. Brij Mohan Mundotiya

#### **Assistant Professor**

Ph.D.(Materials Engineering), M.E.(Materials Eng.), B. Tech.(Metallurgical & Materials Eng.)

**Research Interests**: Thin films, Synthesis and characterization of Ultrafine and Nanostructured materials, Nanostructured thin films, Nanostructured Coatings.

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## Dr. Jyotirmaya Kar

#### **Assistant Professor**

Ph.D.(Metallurgical & Materials Engg), M.Tech. (Metallurgical & Materials Engg), B.Tech. (Metallurgical & Materials Engg)

**Research Interests:** Joining of Materials, Structure-Properties Correlation.

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Google Scholar Profile

#### Dr. Krishna Kumar

#### **Assistant Professor**

Ph.D.(Metallurgical and Mat. Engg.),M.Tech.(Materials Engineering),B.Tech.(Metallurgical Engineering) **Research Interests:** Carbon nanoparticles, nanocomposites, Engineering Materials, Extractive Metallurgy,
Heat Transfer, Mechanical behaviour of materials, Solvent extraction, , Thermodynamics, Thermoelectric materials for Energy conversion and storage, Wastewater Treatment.

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Google Scholar Profile

#### **Dr. Kunal Borse**

#### **Assistant Professor**

Ph.D.,M.Tech.(Materials Science),B.Tech.(Metallurgical Engineering)

**Research Interests:** Materials Science, Nanostructured thin film solar cells, Optoelectronics and Photonics, Photo-voltaic Materials, Polymer-fullerene bulk heterojunction organic solar cell, Corrosion and Surface Engineering, Electrochemistry.

kunal.meta@mnit.ac.in View Detailed Profile Google Scholar Profile

#### Dr. Manjesh Kumar Mishra

#### **Assistant Professor**

Ph.D.(Met. Engineering & Mater. Sci.), M. Tech. (Met. Engineering & Mater. Sci.), B. Tech. (Metallurgical Engineering)

**Research Interests:** Friction welding, Mechanical behaviour of materials, Testing and characterization of materials.

manjesh.meta@mnit.ac.in View Detailed Profile Google Scholar Profile

## Dr. Rajesh Kumar Rai

#### **Assistant Professor**

Ph.D.(Materials Engineering), M.E.(Materials Engineering), B.Tech.(Metallurgy)

**Research Interests**: Structure-Properties Correlation, Microscopy, Heat Treatment, Alloy design, Fatigue, Creep, Creep-Fatigue Interaction, Deformation Micro-mechanisms, Superalloy, Ti-alloy, Steel,

Tension/compression tests, Electrochemistry, Fracture Mechanics, Nanomaterials.

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## Dr. Randhir Kumar Singh

#### **Assistant Professor**

Ph.D.(Materials Engineering), M.Tech. (Metallurgical & Materials Engg), B.Tech. (Materials & Metallurgical Engg)

**Research Interests**: Fatigue, Creep-Fatigue Interactions, Testing & Characterization of Materials, Hot Deformation Studies, Mechanical Behaviour of Materials, Heat Treatment, Structure-Properties Correlation, Superalloy, Titanium alloys, Steels.

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#### Dr. Sreekumar Vadakke Madam

#### **Assistant Professor**

Ph.D.(Metallurgical and Materials En), B.E.(Metallurgical Engineering)

**Research Interests :** Metal Casting, Composite Materials / Nano-composite Materials, Ceramic Materials, Material Science, Tribology, DOE, Composite and Nanocomposite materials, Advanced Manufacturing Technologies.

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#### Dr. Swati Sharma

## **Assistant Professor**

Ph.D.(Materials & Metallurgical Engg), M. Tech.(Materials & Metallurgical Engg), B.E.(Metallurgical Engg.)

Research Interests: Specialization - Physical and Mechanical Metallurgy, Area of Interest - Structure-

Property Correlations, Phase Transformations, Alloy Design, Tribology, Surface Engineering.

swati.meta@mnit.ac.in

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Google Scholar Profile Personal Website

#### Dr. Vijay Navaratna Nadakuduru

#### **Assistant Professor**

Ph.D.(Materials & Process Engg), M.Tech. (Metallurgical & Materials Engg), B.E. (Metallurgical Engineering)

Research Interests: Mechanical working of metals, Powder metallurgy mainly powder processing and

consolidation, Synthesis and characterization of Ultrafine and Nanostructured materials, Shape Memory Alloys, Light Alloy Materials, Friction Stir Welding of Automobile and Aerospace Materials, Bulk Metallic Glass.

vijay.meta@mnit.ac.in View Detailed Profile Google Scholar Profile

#### **Facilities**

Department of Metallurgical and Materials Engineering is one of the foundation departments in this institute. It has nine laboratories. Most of the laboratories cater not only to undergraduate and Post Graduate courses but also to research work in the form of sponsored research project, industrial consultancy, postgraduate dissertation, doctoral dissertation and B.Tech.project work.

## **Electrometallurgy and Corrosion Lab**

- 1. Cu-Plate Corrosion Tester
- 2. Digital Photo Calorimeter
- 3. Electroless Coating System
- 4. Conductivity meter
- 5. Muffle Furnace (900 °C)
- 6. Oven
- 7. Fume Hood
- 8. Digital Weighing Balance
- 9. Hot Plate
- 10. Potentiostat
- 11. DC power source
- 12. pH meters

# **Extractive Metallurgy Laboratory**

- 1. Muffle Furnace
- 2. Vacuum Furnace
- 3. Tube Furnace
- 4. pH meter
- 5. Laboratory Centrifuge
- 6. Programmable DC Power Supply
- 7. Weighing Balance

## **Powder Metallurgy Laboratory**

- 1. Pusher Type Sintering Furnace (1200 °C)
- 2. Horizontal High Energy Ball Mill
- 3. Hydraulic Press
- 4. Universal Testing Machine
- 5. Vacuum Oven
- 6. Sieve Analyser
- 7. Carneys Apparatus

- 8. Data Acquisition System
- 9. Attrition Mill
- 10. Digital Weight Balance

## **Mineral Processing Laboratory**

- 1. Jaw Crusher
- 2. Roll Crusher
- 3. Disc Pulveriser
- 4. Rod Mill
- 5. Ball Mill
- 6. Single and Double Deck Screener
- 7. Air Classifier
- 8. Froth Floatation Cell
- 9. Magnetic and Pneumatic Separator
- 10. Solid State Reactor
- 11. Induction Furnace (2nos)

## **Testing of Materials Laboratory**

- 1. Hounsfield Tensometer
- 2. Vertical Tensometer
- 3. Brinell Hardness Tester (3nos)
- 4. Rockwell Hardness Tester
- 5. Vickers hardness Tester
- 6. Impact Testing Machine (2nos)
- 7. Erichsen cupping Tester
- 8. Shore Hardness Tester

# Physical Metallurgy and Heat Treatment Lab

- 1. Disc polishing machine
- 2. Induction Furnace
- 3. Tubular controlled atmosphere furnace
- 4. Muffle furnaces
- 5. Salt bath furnaces
- 6. High temperature viscometer
- 7. Atomic absorption spectrometer
- 8. Optical microscopes
- 9. Automatic polishing machine
- 10. Pin-on-disc wear testing machine
- 11. Tabor tester

# **Mechanical Working of Metals Laboratory**

1. Rolling machine

- 2. Shaper machine
- 3. Drilling machine
- 4. Lathe machine
- 5. Forging machine

## **Materials Science and Plasma Nitriding**

- 1. Flat plate collector
- 2. Solar concentrator
- 3. PV energy system
- 4. Solarimeter
- 5. Modelling and simulation software
- 6. Thermal scanner
- 7. Flue gas analyser
- 8. Energy simulation software
- 9. CFD software

## **Steel Research Laboratory**

- 1. Multi-viewer Microscope (Leica DM6000M)
- 2. Inverted Microscope (Zeiss Vert.A1)
- 3. Differential Scanning Calorimeter (DSC404F3A01)
- 4. Image Analyser (Leica DM 6000 M)
- 5. Micro Hardness Tester (UHL VMHT VMH-002V)
- 6. Rockwell Hardness Tester (Tinius Olsen FH031-0000)
- 7. Vicker's Hardness Tester (RVM50)
- 8. Universal Testing Machine (Tinius Olsen H25KL-0030)
- 9. Universal Testing Machine (Instron-8862)

## **Metallography Laboratory**

- 1. Inclined Monocular Microscope (15nos)
- 2. Trinocular Metallurgical Microscope
- 3. Disc Polishing Machine

## **Fuels and Furnaces Laboratory**

- 1. Salt bath vertical muffle furnace (2nos)
- 2. Muffle Furnace
- 3. Oven (2nos)
- 4. Raising Hearth Furnace (1400°C)
- 5. Rotary Furnace
- 6. Tube furnace
- 7. Bottom pouring pot furnace/li>
- 8. Viscometer (Redwood and Engler apparatus)
- 9. Flash and Fire point apparatus (Cleave land, Pansky Martin and Abels)

- 10. Bomb Calorimeter
- 11. Boy's Calorimeter

## **Foundry Laboratory**

- 1. High-Temperature Muffle Furnace (1200°C)
- 2. Vertical Muffle Furnace (900°C)
- 3. Horizontal Muffle Furnace (900°C)
- 4. Oven (300°C)
- 5. Slurry Pot Tester With Controller
- 6. Airjet Erosion Tester Tr-471-400 Material Characterisation Systems
- 7. Peel Back Tester
- 8. Sand Washer
- 9. Infrared Moisture Sensor
- 10. Sieve Shaker
- 11. Digital Universal Testing Machine
- 12. Hot Tensile Tester
- 13. Stick Point Tester
- 14. Core Gas Determinator
- 15. Permeability Tester
- 16. Sand Rammer
- 17. Shatter Index
- 18. Hydraulic Press
- 19. Rapid Slurry Formation setup with Furnace
- 20. Silicon Carbide Furnace (1400°C)
- 21. Vertical Drilling Machine
- 22. Sand Siever
- 23. Wear Testing Machine With Controller
- 24. High Shear Mixing Device
- 25. Digital Weighing Balance

## **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## Journal Publications (229)

#### 2023

Prasanta Kumar Sahoo, Niraj Kumar, Abhishek Tripathi, "Direct growth of hierarchically SnS2 layered nanostructure on nickel foam for high-performance solid-state supercapacitors", Materials Today: Proceedings Volume:74 / 730-735 / 2023

Nikunj Patel, Sunil Manani, Ajaya Kumar Pradhan, "Effect of Addition of Cu on Microstructure and Some Properties of 5754 Aluminum Alloy", Transactions of the Indian Institute of Metals Volume :76 / 1929 1936 / 2023

Sunil Manani, Nikunj Patel, Ajaya Kumar Pradhan, "Effect of Modified Casting Process on Toughness and Wear Resistance of LM25 Alloy", Transactions of the Indian Institute of Metals Volume:76 / 1095 1102 / 2023

Jyotirmaya Kar, "Effect of process parameters on porosities in electron beam welded AA-6061 to AA-2024 dissimilar joints", Welding in the World Volume: 67 / 2007-2016 / 2023

K Vamsi Krishna, Sriharitha Rowthu, Vijay N Nadakuduru, Ganesh Pilla, N Kishore Babu, "Effect of Welding Speed and Post Weld Heat Treatment on Microstructural Characterization and Mechanical Properties of Gas Tungsten Arc Welded Ti-15V-3Al-3Cr-3Sn Joints", Fusion Science and Technology Volume:00 / / 2023

#	Project Investigator	Title of the project	Funding Agency
1	Dr. Kunal Borse	Development of a novel method for the synthesis of printable CIGS ink for solar photovoltaic application	RAC-S ISR
2	Dr. Kunal Borse	Synthesis and characterization of CZTSe thin film deposited by electroless plating method for solar cell applications	INUP-i2i II Delhi
3	Dr. Rajesh Kumar Rai	Development of AlCoCrFeNiTi high entropy alloy for high-temperature aerospace applications	ISRO-RAC
4	Prof. Rajendra Kumar Goyal	Additive Manufacturing of Carbon Fibers/Rice Husk Ash Reinforced Polymer Nanocomposites for Aerospace Heat Sink	ISRO
5	Dr. Manjesh Kumar Mishra	Assessment of Additive Manufactured Titanium Alloy and Cast Nickel-Aluminium- Bronze Alloy An Exploratory Study for Naval Propeller Material	NRB, DRD
6	Dr. Sreekumar Vadakke Madam	Novel Material Manufacturing method for Large Volume Cast Metal Matrix Nanocomposites (Ultra-Cast)	Ministry o Mines
7	Prof. Rajendra Kumar Goyal	Development of Emerging Materials (FIST-2021)	DST
8	Dr. Swati Sharma	MORPHOLOGY CONTROL Effect of thermal processing on the morphology of asmilled powders of metal and metal alloys (iron, copper, and HEAs) – A Feasibility Study	Scinomat Solution Po Ltd
9	Dr. Krishna Kumar	The coating of CuNiFeCrMo Graphene oxide Nano composites on CFRP - Carbon Fiber Reinlbrced Plastics / Composites to improve Thermal Conductivity & Electrical Conductivity properties of CFRP	ISRO Bangalore
10	Prof. Upender Pandel	The coating of CuNiFeCrMo-Graphene Oxide nanocomposites on CFRP- Carbon Fiber Reinforced Plastics/ Composites to improve thermal conductivity and	ISRO

Krishna, C. Gopi Krishna, Polamarasetty Nagendra, M.K. Talari, Vijay N. Nadakuduru, Nagumothu Kishore Babu, "Microstructural characterization and mechanical properties of metastable beta and alpha+ beta titanium alloy electron beam weldments, Fusion Science and Technology (Accepted)", Fusion Science and Technology Volume: 0 / / 2023 Projects

electrical conductivity properties of CFRP

- Research Projects
- Testing & Consultancy Projects

## **Research Projects**

#### **Patents**

"Development of Robust Super-Hydrophobic Plasma Sprayed High Entropy Alloy Coating", Swati Sharma, Atirek Gaur, Rahul Kumar, Satish Indupuri, Upender Pandel, Anup Kumar Keshri, Reg.No. 202311035693 [The Controller of Patents, The Patent Office Branch, Delhi] Dt.23-05-2023

"A METHOD AND AN APPARATUS FOR SIMULTANEOUSLY PERFOMING DIP COATING ON MULTIPLE SUBSTRATES", Dr. Kunal Borse, Ishwar Sharma, Gaurav Kumawat , Reg.No. 202311027556 [Patent Office, India] Dt.13-04-2023

"A WATER-BASED CZTS PARTICLES AND PROCESS OF PREPARING THE SAME", Dr. Kunal Borse, Ishwar Sharma, Prof. R. K. Goyal, AK Vinay Kumar, Biddika Lokesh, J. Sai Ram, Karra Machender, P. Prathyusha, N. Akshaya, Reg.No. 202311008628 [Patent Office, India] Dt.10-02-2023

"A METHOD TO IMPROVE CORROSION RESISTANCE AND REDUCE CORROSION RATE IN MILD STEEL", Dr. Kunal Borse, Ishwar Sharma, Prof. R. K. Goyal, AK Vinay Kumar, Biddika Lokesh, Hemant Gulupalli, Reg.No. 202311008500 [Patent Office, India] Dt.09-02-2023

"Modified white cast iron alloy composition for improved toughness and wear resistance in as cast condition", JK sahu PSM Jena RK Rai SK Das , Reg.No. PAT 0506 2017 IN [CSIR ] Dt.01-12-2017

"A PROCESS FOR THE MANUFACTURE OF MGAL204 REINFORCED AL MATRIX COMPOSITES USING SOLID SILICA SOURCES", Sreekumar V M, Rajan T P D, Reg.No. 283590 [Indian Patent and Trademark Office]

Dt.01-07-2017

"Patent - A Process for Manufacturing Horseshoes", Dr. S. Sangal, Dr. K. Mondal, K.C. Chandrasekhar, A. Varshney, S. Sharma, Reg.No. 201711004727 [INTELLECTUAL PROPERTY INDIA]

Dt.09-02-2017

"Production of Fine grained Ultra high Hardness Steel by powder metallurgy", Prof. Upender Pandel, Prof. M.K. Banerjee & Dr. Akshay Kumar , Reg.No. 201711004203 [MNIT Jaipur] Dt.02-02-2017 Event Organized

National Workshop on **Training on Simulation software ANSYS and Indo-USA students interaction** at MNIT Jaipur, Jaipur, India from 07-08-2023 to 11-08-2023

National Workshop on **Non Destructive Techniques and Applications** at Department of Metallurgical & Materials Engineering, MNIT Jaipur and IIM Jaipur Chapter, Jaipur, India from 27-07-2023 to 27-07-2023

National Workshop on **Space and Aerospace Materials** at Department of Metallurgical & Materials Engineering, MNIT Jaipur and IIM Jaipur Chapter, Jaipur, India from 27-05-2023 to 27-05-2023

National Workshop on **Surface Engineering and Materials Technology** at Department of Metallurgical & Materials Engineering, MNIT Jaipur, Jaipur, India from 10-03-2023 to 10-03-2023

National Short Term Course on **Metallurgy for Non-Metallurgists for Senior Executive/Engineers** at MNIT Jaipur, Jaipur, India from 19-01-2023 to 25-01-2023

National Short Term Course on **Advanced Manufacturing Processes** at MNIT Jaipur, Jaipur, India from 12-12-2022 to 16-12-2022

National Seminar on Latest Developments in Engineering Materials and Manufacturing Processes at The Institution of Engineers (India), & Dept. of Metallurgical & Materials Engg., Jaipur, India from 17-09-2022 to 18-12-2022

National Short Term Course on **Materials Processing and Characterization** at MNIT Jaipur, Jaipur, India from 05-08-2022 to 09-08-2022

National Workshop on **Materials Testing & Characterization for Academia and Industries** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 22-07-2022 to 26-07-2022

National Workshop on **National Workshop on Recent advances in metal alloy design and processing** at Malaviya National Institute of Technology Jaipur, , Jaipur, India, India from 01-11-2021 to 05-10-2021

## **Awards & Honours**

"Prof. Rajendra Kumar Goyal", World top 2 percent scientist for the year 2022 for given by Stanford University Rankings 2022

"Prof. Rajendra Kumar Goyal", Subject expert for Syllabus Framing given by Rajasthan Public Service Commission (RPSC)

"Dr. Rajesh Kumar Rai", Certificate of Recognition of outstanding contribution in the Review for Peer review given by Journal of Materials Processing Technology, Elsevier

"Dr. Rajesh Kumar Rai", Certificate of Recognition of the Review Contribution for Peer review given by Vaccum Elsevier "Prof. Rajendra Kumar Goyal", Alumni Distinguished Faculty Fellow (ADFF) Award for given by Alumni Association of College of Engineering, Pune

"Prof. Rajendra Kumar Goyal", Best Oral Presentation Award for 1st International Conference on Functional Materials for Defence (ICFMD-2012) given by Defence Int. Adv. Tech., Pune, Naval PG School, USA and Office of Naval Research (Global), USA

"Dr. Swati Sharma", Editor's choice for free access for publication in Metall. and Met. Trans. A for Titled - "Development of new high strength carbide free bainitic steels― given by Metall. and Met. Trans. A

"Prof. Rajendra Kumar Goyal", Alumni Distinguished Faculty Fellow (ADFF) Award for given by Alumni Association of College of Engineering, Pune

"Prof. Rajendra Kumar Goyal", G C Jain Memorial Prize for the Best Ph.D. Thesis for given by Materials Research Society of India (MRSI)

"Prof. Rajendra Kumar Goyal", Merit cum scholarship for given by MHRD

"Prof. Rajendra Kumar Goyal", Merit cum scholarship for given by MHRD

## **Welcome to Department of Physics**

## **Department by the Numbers**

14	Faculty
655	Journal Publications
106	Conf. Publications
60	Research Projects

### PhD Awarded

## **About the Department**

New developments in Physics have led to paradigm shifting transformations in Engineering & Technology. It is thus critical that Physics be an integral part of Engineering Education. The Department of Physics has been dedicated to imparting quality Physics education since the inception of MNIT Jaipur. The Department is currently DST-FIST (Level 1) sponsored. The Department also offers a vibrant research program with 14 full-time faculty, and spans over condensed matter physics, cosmology, energy systems, high energy physics, nuclear and particle physics and materials research.

The Department has the following objectives:

- 1. To impart high quality Physics education to engineering graduates at all levels through curricula based on the present and future Engineering & Technological needs of the country.
- 2. To produce outstanding post-graduates in Physics, through our M.Sc. Physics and Ph.D. programs, who can take a lead role in Research & Development activities in industries and academia.
- 3. Conduct cutting edge research in both fundamental and applied areas of Physics and related multidiscplinary areas.

#### **Vision Statement**

To create a centre for imparting technical education of international standards and conduct research at the cutting edge of technology to meet the current and future challenges of technological development.

#### **Mission Statement**

To create technical manpower for meeting the current and future demands of industry: To recognize education and research in close interaction with industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the Institute with sensitivity to social development and eye for opportunities for growth in the international perspective.

#### **Contact Information**

## Prof. Kanupriya Sachdev

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- Faculty
- Staff
- Research Scholars
- PhD Awarded

## **Faculty**

## **Head of Department**

## Prof. Kanupriya Sachdev

#### **Professor**

Ph.D.(Physics), M. Phil.(Physics), M.Sc.(Physics), B.Sc.(Physics, Maths, Chemistry)

**Research Interests**: Material Science and technology, Condensed Matter Physics, Transparent Conducting thin film oxides, Metal oxide doped with metal & rare earth metal, Surface modification by ion beam irradiation/ Glow Discharge Plasma, Thermo-chemical behavior of amorphous alloys, Gas Sensing, Thermoelectric materials for Energy conversion, Graphene and its composites for various applications, Energy Storage, Supercapacitor, Battery Technology.

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#### Assistant Professor

## Dr. Akhilesh Nautiyal

#### **Assistant Professor**

Ph.D.(Physics), M.Sc.(Physics), B.Sc.

**Research Interests :** Cosmology, Astroparticle Physics, Inflation, CMB Physics, Dark Energy and Dark Matter.

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#### Dr. Anees Ahmed

#### **Assistant Professor**

Ph.D.(Theoretical Physics), M.Sc.(Physics), M.Sc.(Physics), B.Sc.(Physics)

**Research Interests :** Theoretical Physics, Non-perturbative methods in quantum mechanics and quantum field theory, Resurgent asymptotics in QFT and matrix models.

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Google Scholar Profile

#### Dr. Anirban Dutta

#### **Assistant Professor**

Ph.D.(Physics), M.Sc.(Physics), B.Sc.(Physics Honours)

**Research Interests**: Scanning Tunneling Microscopy and Spectroscopic studies of strongly correlated systems, Instrumentation, Electronic properties and Local electronic Density of states, Time resolved ultrafast LASER microscopic and spectroscopic studies of strongly correlated systems and semiconductor nanocrystals, Electrical transport and low temperature measurements, Magnetism and superconductivity (High Tc Superconductor).

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# <u>View Detailed Profile</u> <u>Google Scholar Profile</u>

#### Dr. DEBASISH SARKAR

#### **Assistant Professor**

Ph.D.(Physics), M.Sc.(Physics), B.Sc.(Physics)

**Research Interests**: Functional nanomaterials, # Nanoparticle Synthesis, Growth and Assembly, # Nanoscale Electrochemistry, Electrochemical Energy Conversion and Storage Systems.

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#### Dr. K Venkataratnam Kamma

#### **Assistant Professor**

Ph.D.(Physics), M. Phil.(Physics), M.Sc.(Physics)

Research Interests: Cosmology.

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#### Dr. Kamakshi Pandey

#### **Assistant Professor**

Ph.D.(Physics),M.Sc.(Physics),B.Sc.(Physics Chemistry Mathematics),Sr. Secondary(Physics Chemistry Mathematics Hindi English),Secondary(Science Mathematics Hindi English Social science Sanskrit)

Research Interests: Self Assembly in Polymers, Functional nanomaterials and Membranes, Bio-Electronic Interfaces.

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#### Dr. Kamlendra Awasthi

## **Assistant Professor**

Ph.D.(Physics), M. Phil.(Physics), M.Sc.(Physics)

**Research Interests**: Nanostructured thin films, Membrane Separation, Polymer Nanofilters, Block copolymers, Polymer solar cell, Hydrogen separation, Gas separation and sensing, Soft Materials, Functional nanomaterials, Hydrogen Energy: Generation, Separation, Sensing and Storage.

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#### Dr. Kavita Lalwani

## **Assistant Professor**

Ph.D.(Experimental High Energy Phys.), M. Phil. (Physics), M.Sc. (Physics), B.Sc.

**Research Interests**: Hadron Structure, Physics beyond the Standard Model, CP Violation, Silicon Sensor development, Hadron Therapy.

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## Dr. Manoj Kumar

#### **Assistant Professor**

Ph.D.(High-Pressure Cond. Mat. Phys.), M. Phil.(Physics, Sp.-Plasma Physics), M.Sc.(Physics, Sp.-Electronics)

**Research Interests**: High Pressure Physics, Low Temperature Electrical and Magnetotransport Properties, Thermoelectric materials for Energy conversion and storage, Topological Insulators and Topological Superconductors, Energy Systems, Energy Storage, Spintronic materials, Electrochemical sensors for environmental applications.

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## Dr. Rahul Singhal

## **Assistant Professor**

Ph.D.(Materials Science), M.Sc.(Physics), B.Sc.(Physics, Chemistry, Maths)

**Research Interests**: Optical properties of metal nanoparticles, Nanostructured thin films, Polymer-fullerene bulk heterojunction organic solar cell, Ion irradiation effects on SMA thin films, Carbon nanostructures.

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## Dr. Rajnish Dhiman

#### **Assistant Professor**

Ph.D.(Physics), M.Sc.(Physics), B.Sc.(Physics, Chemistry, Maths)

**Research Interests**: # Electrochemical Energy Conversion and Storage Systems, # Nanoparticle Synthesis, Growth and Assembly, Nanoparticle synthesis, Materials Science, Graphene and its composites for various applications, Surface Science.

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#### Dr. Srinivasa Rao Nelamarri

#### **Assistant Professor**

Ph.D.(Physics), M.Sc.(Physics), B.Sc.(Physics, Maths, Comp. Sci.)

**Research Interests**: Synthesis, characterization and modification of semiconductor nanostructures, Nanostructured thin films, Growth and modification of high K oxides, Applications of metal and semiconductor nanocrystals.

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# Dr. Subhayan Mandal

#### **Assistant Professor**

 $Ph.D. (Astro-Particle\ Physics), M.Sc. (Physics), B.Sc. (Physics\ Honours)$ 

Research Interests: High Energy Astro-Particle Physics Phenomenology.

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# Team

1. Head

**Roles and Responsibilities** 

2.	Convener, Departmental Postgraduate Committee (DPGC)	Dr. Rahul Singhal
<b>3.</b>	Convener, Departmental Undergraduate Committee (DUGC)	Dr. N. Srinivasa Rao
4.	B. Tech. Theory Coordinator	Dr. Rajnish Dhiman
<b>5.</b>	B. Tech. Lab Coordinator	Dr. Anees Ahmed
<b>6.</b>	M.Sc. I Year Program Advisor	Dr. K. Venkataratnam Kamma
7.	M.Sc. II Year Program Advisor	Dr. Debasish Sarkar
8.	PG Dissertation Coordinator	Dr. Kamlendra Awasthi
9.	Faculty coordinator for M.Sc./ Ph.D. admission/registration	Dr. Subhayan Mandal
10.	Time Table Coordinator	Dr. Debasish Sarkar
11.	Overall Teaching Labs Coordinator	Dr. Manoj Kumar
<b>12.</b>	M.Sc. I Semester Lab Coordinator	Dr. Anirban Dutta
13.	M.Sc. II Semester Lab Coordinator	Dr. Rajnish Dhiman
14.	M.Sc. III Semester Lab Coordinator	Dr. Debasish Sarkar
<b>15.</b>	Coordinator for Teaching Assistantship	Dr. Manoj Kumar
16.	Departmental Library Coordinator	Dr. Kamlendra Awasthi
17.	Coordinator: Dept. Annual Report, Dept. Information, Dept. Brochure, any other Dept. Information related activity	Dr. Akhilesh Nautiyal
18.	Coordinator: Departmental website updates	Dr. Kamakshi Pandey
19.	Convener: Departmental Purchase Committee (DPC) & Local Purchase Committee (LPC)	Dr. N. Srinivasa Rao
20.	Coordinator: RTI related to department	Dr. Subhayan Mandal
21.	Faculty coordinator Digital India	Dr. Rajnish Dhiman
22.	Faculty coordinator Unnat Bharat	Dr. Anees Ahmed
23.	Faculty coordinator Swachech Bharat	Dr. Kamakshi Pandey
24.	Faculty coordinator Skill Development	Dr. Anirban Dutta
25.	I Onvener: Henartmental Allimni	Dr. Kavita Lalwani [Members: Program two (2) passed out years]
26.		Dr. Akhilesh Nautiyal
		Dr. Anirban Dutta
	E 11:1:	

Prof. Kanupriya Sachdev

Facilities

# Teaching Labs

1. U.G. Lab For B.Tech. program

Pedagogical experiments from various Physics areas. Please see the B.Tech. Lab syllabus in the Academics section for more details.

1. P.G. Lab For M.Sc. program

There are three labs in the Department catering to the first three semesters of the M.Sc. program:

- (i) Electronics lab
- (ii) Nuclear Physics and Spectroscopy lab
- (iii) Solid State Physics lab. Please see the M.Sc. Lab syllabus in the Academics section for more details.

## **Research Labs**

- 1. Electrochemical Energy Conversion & Storage Lab
- 2. Electrochemical Energy Research Lab
- 3. Experimental High Energy Physics Lab
- 4. Functional Materials Research Lab
- 5. High Pressure Physics Lab
- 6. Nanomaterials Research Lab
- 7. Optical Material Lab
- 8. Soft Materials Lab

#### **Publications**

- Journal Publications
- Conference Publications
- Book/Chapter Publications

## **Journal Publications (655)**

#### 2023

Umadevi Prasanna, Vijaya Kumar Kambila , Rajesh Cheruku , Krishna Jyothi Nadella , K. Venkatratnam Kamma , Manju V.V., " Electrical, transport, and optical properties of a novel PVB-NaNO3 complexed solid polymer electrolyte thin-films for solid-state battery" , Materials Today: Proceedings Volume:may4,2023 / / 2023

Suniksha Gupta, Smita Howlader, Satyavir Singh, Atul Sharma, K Asokan, MK Banerjee, K Sachdev, "A Study on the Effect of 50 keV Nitrogen Ion Implantation in Mg2Si Thin Films", silicon Volume:. // 2023

Shiv Dutta Lawaniya, Sanjay Kumar, Yeontae Yu, Kamlendra Awasthi, "Ammonia sensing properties of PPy nanostructures (urchins/flowers) towards low-cost and flexible gas sensors at room temperature", Sensors and Actuators B: Chemical Volume: 382 / 133566 / 2023

Ankita Jangid, B. S. Ratanpal, K Venkataratnam Kamma, "Anisotropic Compact Star Model on Finch-Skea space-time", Gravitation and Cosmology Volume: 29 / / 2023

Ankush Agrawal, Ruhani Sharma, Ankita Sharma, Kailash Chand Gurjar, Sanjay Kumar, Samit Chatterjee, Harsh Pandey, Kamlendra Awasthi, Anjali Awasthi, "Antibacterial and antibiofilm efficacy of green synthesized ZnO nanoparticles using Saraca asoca leaves", Environmental Science and Pollution Research Volume:00 / / 2023 **Projects** 

- **Research Projects**
- **Testing & Consultancy Projects**

# Research Projects

**Project** 

#	Project Investigator	Title of the project	Funding Agency
1	Prof. Kanupriya Sachdev	Performance exploration of LTMO and vertically aligned MWCNT on graphene material for efficient and sustainable Na-Ion batteries	ISRO
2	Dr. Rahul Singhal	Impact of electronic and nuclear energy loss with moderate energy on metal-fullerene nanocomposite (WOS-A project of Ms. Jyotsna Bhardwaj)	DST New Delhi
3	Dr. Manoj Kumar	Tuning of electrical properties through magnetic doping in 3D topological insulators	(As Mentor) INSPIRE (Ph.I. Student) DST New Delhi
4	Dr. Manoj Kumar	Intercalation of Rare-Earths in MXenes and their Impact on Magnetism and Electrical Transport for Spintronic Applications	(As Mentor) WOS-A (Postdoctoral Project) DST, N Delhi
5	Dr. Kamlendra Awasthi	X-ray absorption spectroscopy of single atom (Pt and Pt-group) based electrocatalysts	UGC-DAE CSR, Indore
6	Dr. DEBASISH SARKAR	In-situ and Operando X-ray Absorption Spectroscopy of the MoS2 Electrode to Reveal Its Charge Storage Mechanism in a Supercapacitor Cell	UGC-DAE CSR Indore
7	Dr. Rahul Singhal	Study of Au-Fullerene nanocomposite under low energy ion irradiation	Inter University Accelerator Centre New Delhi
8	Dr. DEBASISH SARKAR	Nanostructured Carbon Electrodes for High-Voltage Hybrid Ion Supercapacitors	ISRO RAC-S
9	Dr. Kamlendra Awasthi	Track etched membrane based bimetallic nanowires for hydrogen sensing	IUAC-UGC, New Delhi
10	Dr. Rahul Singhal	Development of Novel CCTO/Polymer composites for EMI	ISRO

Attenuation

**ISRO** 

**Patents** 

10 Dr. Rahul Singhal

"Substrate Integrated Nanostructured Nickel-iron Ultra-battery", Debasish Sarkar, D. D. Sarma, Ashok Shukla, Reg.No. 422547 [Indian Patent Office]

Dt.21-02-2023

"Banana Peel Biochar for the Development and Visualization of Latent Friction Ridges", Vinay Aseri, Anjali Awasthi, Garima Awasthi, Kamlendra Awasthi, Kumud Kant Awasthi. Rushikesh Laxman Chopde, Vard Nagar, Pritam Pradip Pandit, Kapil Parihar, Mahipl Singh Sankhla, Rohit Verma, Reg.No. 20 2022 104 027 [German Patent and Trade Mark Office, Munich, Germany]

Dt.28-09-2022

"Energy Storage Device with Substrate Integrated Core-Shell Nano-structured Electrodes and Method Thereof", Debasish Sarkar, D. D. Sarma, Ashok Shukla , Reg.No. 201641020589 [Indian Patent Office]

Dt.16-03-2022

"Process for Substrate Integrated Growth of Nanostructured Electroactive Material on a Substrate", Debasish Sarkar, D. D. Sarma, Ashok Shukla , Reg.No. 201641005449 [Indian Patent Office]

Dt.22-02-2022

"GRAPHENE OXIDE BASED SOLAR TILES FOR MAINTAINING CONSISTENT HOME TEMPERATURE", R P Joshi, H S Dhami, P Kumar, A Pandey, Rahul Singhal, Shipra, B P Joshi, Vijay Kumar, Kashma Sharma, Karnika Pandey , Reg.No. 201911017675 [UCOST, Govt. of India] Dt.03-05-2019

#### **Event Organized:**

International Conference on **Soft Materials (ICSM 2022)** at MNIT Jaipur, Jaipur, India from 11-12-2022 to 16-12-2022

National Workshop on **Role of Personal Development in Career Growth** at MNIT, Jaipur, India from 07-09-2022 to 07-09-2022

National Short Term Course on **PHOTOELECTRON SPECTROSCOPY FOR MATERIAL SCIENCE** at Malaviya National Institute of Technology, Jaipur, India from 31-01-2022 to 04-02-2022

International Workshop on **One Week Online High-End Workshop (Karyashala) on Software Tools and Techniques used in EHEP and its Applications** at MNIT Jaipur, Jaipur, India from 12-07-2021 to 19-07-2021

National Workshop on **Fundamentals of Astronomy** at B M Birla Planetarium, Jaipur, India from 07-01-2021 to 13-01-2021

National Short Term Course on **Spectroscopic Techniques for Materials Characterization** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 04-01-2021 to 08-01-2021

International Workshop on **Polymers for Energy Conversion and Storage** at MNIT Jaipur, Jaipur, India from 13-12-2020 to 13-12-2020

National Workshop on **Workshop on Modeling & Simulation Tools** at Malaviya National Institute of Technology, Jaipur, India from 20-10-2020 to 24-10-2020

National Workshop on **TEQIP-III Sponsored online workshop on "Functional Materials"** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 07-09-2020 to 11-09-2020

National Short Term Course on Fivedays online STC on Software Tools and Techniques for Scientific Publications: ROOT, GNU Plot, GeoGebra 2020 at Malaviya National Institute of Technology Jaipur, Jaipur, India from 04-09-2020 to 08-09-2020

National Workshop on **Quantum Computing** at Malaviya National Institute of Technology Jaipur, Jaipur, India from 24-08-2020 to 29-08-2020

## **Awards & Honours:**

"Dr. Kamlendra Awasthi", Brain Pool Fellow (Invited Scientist) for given by National Research Foundation of Korea

"Dr. Rajnish Dhiman", Senior Research Associate (Pool Scientist) for Research given by CSIR New Delhi

"Dr. Kamlendra Awasthi", Early Career Research (ECR) Award for Research given by SERB, DST New Delhi

"Dr. Manoj Kumar", Early Career Research Award for Research on Topological Insulators and Topological Superconductors given by Science and Engineering Research Board, SERB, New Delhi, India

"Dr. Kavita Lalwani", EMR AWARD for Research given by SERB New Delhi

"Dr. Anirban Dutta", National Post-Doctoral fellowship for Research given by SCIENCE & ENGINEERING RESEARCH BOARD (SERB), India

"Dr. Kamlendra Awasthi", CPCSA Nominee for CPCSEA (Committee for thePurpose of Control and Supervision of Experiments on Animals) given by byMinistry of Environment, Forest and Climate Change-Animal Welafare Division (Govt. of India)

"Dr. DEBASISH SARKAR", INSPIRE Faculty Award for Research given by DST-Govt. of India

"Dr. Kavita Lalwani", Travel Grant for presenting the research work at International Conference, Italy given by Department of Science and Technology (DST), India

"Dr. Kavita Lalwani", Young Researcher Grants for presenting the research work in an International Conference, Italy given by Association of Frontier Detectors for Frontier Physics, La Biodala, Isola, d' Elba, Italy

"Dr. Kavita Lalwani", UGC Women Post-doctoral Fellowship for PDF given by UGC

"Dr. DEBASISH SARKAR", D S Kothari Post-Doctoral Fellow for Research given by UGC, Govt. of India

## **Welcome to Centre for Energy & Environment**

## **Centre by the Numbers**

8	Faculty	
369	Journal Publications	
258	Conf. Publications	
40	Research Projects	

#### **Latest News**

# Celebrating 10 Years of Excellence (2012-2021) and Looking Beyond

## **About the Centre**

Centre for Energy and Environment aims to find sustainable solutions to global energy inadequacy and environmental degradation as the global energy systems will experience major changes in coming decades. These challenges call-for scientific knowledge, innovative-technology development, policy measures and action at local and world level. The sustainability of the system prime importance-environmentally, economically will prove to be of and socially. Although the fossil resources have been fundamental source of energy for human existence since long time in everyday life and now the time of oil discoveries are almost over. Addressing the challenges arising from issues of energy scarcity will involve a massive increase in the utilization of sustainable energy resources like wind, solar and biomass. This transformation will not take place overnight but decades. For this reason, high priority to use renewable energy systems and energy efficeint buildings should be given. Centre of Energy and Environment shares the knowledge and research at the scale of individual components as well as of large-systems, with a focus on the interaction between these two. Centre is at the cutting-edge in northwest India when it comes to research in renewable energy systems. Through wide-ranging team-work and partnerships with the private, public sectors as well as national and international colaborators and responsibilities in the policy process, centre is living up to ambition.

Supporting a transition to a sustainable world!

#### Vision

To foster renewable energy technologies through pedagogical tools, research, and human resource development at various levels, and disseminate the information for sustainable development.

## Mission

- 1. To enable sustainable and cost-efficient innovations and develop interactive facilities pertaining to the multidisciplinary areas of renewable energy and environment.
- 2. To provide quality higher engineering education (viz. M.Tech., Ph.D.) and training programs (viz. one and/or two weeks) for integrating and providing skilled personnel to academia and industry in the area of energy and environment.
- 3. To promote education and awareness related to energy and the environment by becoming a nodal centre of international standards.

- 4. To develop novel, efficient, and affordable testing and standardization methods/protocols for operational reliability of equipment and devices related to energy and environment.
- 5. To showcase cost-effective, clean, and sustainable renewable energy technologies and energy efficiency.

## **Information Brochure**

Click here.

## **Contact Information**

# Dr. Amartya Chowdhury

Head, Centre for Energy & Environment

Malaviya National Institute of Technology

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0141-2713296

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#### **Welcome to Materials Research Centre**

# **Centre by the Numbers**

Centre by the Numbers		
6	Faculty	
253	Journal Publications	
43	Conf. Publications	
14	Research Projects	
2	PhD Awarded	

## To know more about MRC facilities, Click here

In order to augment the infrastructure for advanced research and to attain excellence in innovative research in materials technology, a centre of excellence - Materials Research Centre, has been created under the able support and guidance of the competent authority. The Materials Research Centre (MRC) aims to harness the talent resources of MNIT for promoting interdisciplinary research in appropriate materials technologies. Besides catering to the research needs of the institutional faculty & students, the state of the art research facilities of the Materials Research Centre will also be extended to the scientists, faculty and researchers of other institutes well private sector/ as as to MRC also contemplates instructing qualified potential users on the operation of the available instruments and the interpretation of data. The centre encourages inquiries concerning the development of new methodologies and welcomes contract and potential collaborative work. The equipment procured in Phase I of the Centre has been installed & commissioned. MRC staff and faculty is highly trained and guite thorough on application of these state of the art experimental facilities. The students of MNIT have also received trainings on the equipment & the equipment has been made open to users across the country. The applicable charges can be known from the office, MRC.

#### Vision

To emerge as world class research intensive centre for providing interdisciplinary research and education in frontiers of materials technology. It also contemplates thriving for excellence, knowledge creation & dissemination for useful economic activities, beside creation of new generation scientist resources of the country.

#### Mission

- 1. Promotion of interdisciplinary cutting edge research in the emerging areas of materials technology.
- 2. Provide outstanding technical education for fundamental understanding, materials properties and creation of materials for advanced applications.
- 3. Active collaboration with institutes and universities of national and international repute for enhancement of sponsored research activities in materials technology.
- 4. Evolution of means to encourage industrial participation in technology development and research in areas of mutual interest.
- 5. To provide quality training on various analytical equipment's for creation of highly skilled technical manpower.

#### **Contact Information**

## Dr. Bhagwati Sharma

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Welcome to National Centre for Disaster Mitigation & Management

#### **About the Centre**

National Centre for Disaster Mitigation and Management is an *Academic & Research Center*, established by the Board of Governors (27th Meeting of the Board of Governors, 7 October 2013) as per the NITSER Act, and First Statute of the National Institute of Technologies with a mandate to work in the domain of *Earthquake Safety of the Built Environment*.

The Activities of the Center Include Academics, Research and Outreach. The Centre offers *Master's degree Program* (M. Tech. in Earthquake Engineering) and *Doctoral degree Program* (Ph. D. in various specializations of Earthquake Engineering).

The Centre hosts the *National Earthquake Testing Facility* (NETF) for *Full-Scale Testing* of Buildings, Bridge Girders, Bridge Piers, Bridge Bearing and Base Isolation Devices, etc. under Quasi-static cyclic and Pseudo-dynamic loading. The Centre also has a basic Structural Dynamics Laboratory with microprocessor-controlled electrodynamic shaker with 400 kgf force rating with 150 kg payload, various shaking instruments and different types of building models for conceptual understanding of structural behaviour.

The Centre assists the Bureau of Indian Standards, Civil Engineering Division, Earthquake Engineering Section (BIS: CED-39) for **Standards Development** in the domain of earthquake engineering. The Centre has a **National Advisory Committee** to advise on various priority matters of national importance.

#### Vision

## Earthquake Safety of the Built Environment in India

## **Mission**

- 1. Research for Earthquake Safety as per the National Priorities.
- 2. Technology Qualification, Certification and Development for Earthquake Resistant Design, through testing of full-scale structures, and application state-of-the-art research.
- 3. Earthquake Safety Assessment and Rehabilitation of Specified Dams in India
- 4. Capacity Development of Engineers and Architects in Earthquake Resistant Design and Construction.

## **Welcome to Centre for Rural Development**

Department Login Faculty Login

#### Vision

Development of a state-of-art research and development centre catering to the needs of rural India by technology adaptation and rejuvenating traditional technologies through innovation and adaptation.

#### Mission

- •M1. To develop new technologies and deploy them for rural India
- •M2. Sustainable livelihood through Skill development of rural youth
- •M3. Documentation, validation and adoption of traditional knowledge for its scientific implementation in rural society

## **Objectives**

- Developing water and energy security solutions for rural Rajasthan. (M1)
- Solutions for providing sustainable rural infrastructure and waste management. (M1, M2)
- Small scale entrepreneurship, sustainable cottage industries, development of value added Agro-products. Innovation in Food Processing, Food Packaging, and Food Storage. (M2)
- Harnessing Forest products and helping rural entrepreneurs to develop and sell their products with easy market access. (M2, M3)
- Developing user-friendly interfaces to launch e-platforms for various rural activities that require outreach to larger communities. (M1)
- Evaluation of government welfare schemes to provide appropriate policy recommendations. Access and opportunities for providing gender equality. (M2)
- •Outreach to NGOs, Govt organizations, and international bodies to have a broad-based engagement approach, at the same time networking with similar national and international bodies. (M2)

•Documentation and approval of customary information framework alongside ability advancement and preparing programs for further developing effectiveness and efficiency of rural craftsmen's, experts and so on. Recognizing holes among abilities and effort; Identifying gaps between skills and outreach; and facilitate in filling that gap with consideration to reverse migration. (M3)

## **Welcome to Centre for Cyber Security**

#### Vision and mission of the CCS

The CCS conducts advanced research, training, and development that solves many societal issues and critical infrastructure issues. The Centre for cyber security contributes to the technology society by trailblazing bleeding-edge, practical solutions for the end devices, strong computing foundations, and large-scale critical infrastructure validates through empirical studies,

To conduct High-impactful translational research to empower and facilitate foster sustainable academic collaborations. "The Cyber Centre also executes **hands-on research workforce development activities** to empower the next generation of trainees in focused and multidisciplinary research areas, including cyber forensics, data science and machine learning, systems security, cyber-physical systems, self-driving networking, and advanced cyberinfrastructure." The Centre for Cyber Security (CCS) designs, develops, evaluates, delivers and maintains cyber security and data science tooling capabilities and pluggable agile software for private, state and federal entities.

#### Strategic goals

- •The centre will conduct and develop core cyber security critical mass research in predominant areas like trust, identity, privacy, security and resilience. The centre will facilitate and foster multidisciplinary collaborations among faculty within MNIT Jaipur by exploiting the synergies that exist and by exploring new opportunities. We will create high-priority areas in a timely manner to streamline multidisciplinary research efforts in these areas so as to generate significant momentum early on.
- •The centre will provide foundational support to affiliated faculty to explore and establish closer collaborations with other research institutions/centres (academia, industry and government institutions) locally as well as globally to enable innovation and exploration in relevant research.
- •The centre will establish a seamless, holistic infrastructure to enable affiliated researchers and groups to serve local, regional, and global communities in cyber security and cyber

Name of the faculty	Department/Centre	Res
	Civil Engineering	
	Computer Science & Engineering	Cyber Security Computer Architecture Processor architecture & micro-architecture Memory system design Reconfigurable computing Adaptive computing/architectures Compiler support for modern architectures Fault-tolerant computing Robust design and architectures Self-healing system design VLSI testing and design for testability SoC/NoC design and test Post silicon debug High level synthesis Formal verification Trusted computing FPGA based acceleration Trusted hardware design Cyber physical systems Network router design and algorithms Software defined networking (SDN) Blockchain.
	Computer Science & Engineering	
	Computer Science & Engineering	Data Management Artificial Intelligence Al for Business Automation Al Transparency Foundation Models Trustworthy Al.
Ar. Himanshu Yogi	Architecture & Planning	Additive Manufacturing Advanced Manufacturing Technologies Brand Management Building Envelope and Fenestration Design Building materials Internet of Things Material resuse and recycling New Product Development Green Buildings Branding and Packaging Industrial Design.
Ar. Ram Niwas Sharma	Architecture & Planning	Building Construction and management Building Technology Energy efficiency in buildings Green Buildings Regional Development Sustainable Urban Development.

Name of the faculty	Department/Centre	Res
Dr. Aakanksha Kataria	Management Studies	Organizational psychology, positive psychological interventions, e
Dr. Abbas Raja Naziruddin	Chemistry	Functional Organometallic Chemistry Inorganic-Photo Physics Organometallics for Sustainable Energy and Biological application # Nanomaterials Chemistry for New Materials, Smart Materials at Energy Conservation and renewables Hydrogen energy Organometallic and Coordination Chemistry Photo-voltaic Materials Photcatalytic oxidation.
Dr. Abhishek Tripathi	IIIN/letallurgical X, N/laterials Engineering	Characterization of materials, Crystallographic texture, Thermomometallurgy .
Dr. Ajaya Kumar Pradhan	IIMetallurgical & Materials Engineering	Composite Materials Corrosion and Surface Coatings Tribology Metal Casting.

- •defence/operations with regard to state-of-the-art research, training and education. Such a holistic infrastructure will include:
  - a. A state-of-the-art technical research infrastructure,
  - b. An outreach infrastructure, an infrastructure for translating research into deployable prototypes, processes/methodologies, and tools, and
- c. An infrastructure for research outcomes-driven education, training and awareness. Major Research Area(s)

Research Facilities @ MNIT

## **CENTRE FOR ENERGY & ENVIRONMENT**

## **Facilities**

It is our belief that the best application oriented research outputs may be obtained by having technological developments that takes place in close-fitting interaction with fundamental research.

Our research is organized around a number of technologies, including energy efficient buildings, solar cells. batteries and bioenergy. Our research addresses the critical challenges and needs for development and application of innovative and cost-competitive renewable energy technologies, rather than in mere possible applications of more generic techno-scientific disciplines. Special emphasis is given to synergy between the different research areas benefiting by utilizing our large infrastructure. We are committed for contributing to user-driven and network-based innovative technologies utilizing state-of-art and modern infrastructures available with us. The foundation of our centre is its research infrastructure. The centre is presently set amidst green settings with a sizeable built-up and open area (~400m2) dedicated to the renewable energy research and teaching. The facilities at centre house an unparalleled collection of capabilities that support development, evaluation and demonstration of innovative renewable enerav technologies. Our research competence is enforced with wide-range of lab to field instruments and equipment to carry out application-oriented research for servina the society. The centre has simulation laboratory supported with licensed simulation analytical software packages and dedicated servers. Centre has recently developed Biofuel laboratory.

For more details about research facilities Click here.

# **Energy Storage Laboratory ELECTROCHEMICAL WORKSTATION**

This facility is a computerized general purpose Potentiostat/Bipotentiostat/Galvanostat. It provides Potential applications range from rotating ring-disk electrode (RRDE)experiments to any applications, where dual-channel measurements are essential, such as dual channel electrochemical

Make & Model: 760E, CH Instruments, USA

## **Specifications/Features:**

- A four-electrode configured BiPotentiostat/Galvanostat with high speed dual-channel DAQ circuitry
- Ability to measure both potential and current samples simultaneously at high frequency range up to
- Ability to allow liquid/liquid interfacial measurements.
- Ability to get user-interface with Unicode tabbed document application Applications:
- Useful in the field of electrochemical science, material science and simulation
   Available mode for use:
- Stripping mode: enable/disable, deposition potential and time, stir and purge conditions
- Potentiometric Mode (Step and Pulse)

- Impedance Mode (AC impedance, IMPE/T, ACV/SHACV/FTACV)
- Galvanostatic Mode (CP, CPCR, ISTEP and PSA)

#### **BATTERY TESTING SYSTEM**

This facility is a programmable battery testing system. It is capable of testing and analysing all standard battery types including chemistries of Lead acid, Ni-based, Li-based with real-time monitoring and testing conditions. It is used for determining the battery life using charging/discharging cyclic assessment.

Make & Model: C8000, CADEX Electronics Inc.,

Canada Specifications/Features:

- discharging facility with four independent channels -A programmable charging and -Different programming for different battery chemistries -Adapter units with adjustable holder arms and with Load -Integrated Capture Unit (LCU)
- -Auxiliary data ports for I/O for interfacing SM-Bus, Configurable Digital/Analog outputs or inputs

# **Applications:**

-Useful in the field of life-cycle assessment of battery, charging/discharging battery with different rates (C-rate)

Available	mode			for	use:	
-Constant	Current	Mode	(CC)	for	Charging	
-Constant	Voltage	Mode	(CV)	for	Discharging	
-Load	Capture	Mode	)	(External	load)	

<sup>-</sup>Single Unit/Interface Unit with specific TCP/IP protocol

#### **CENTRIFUGE**

This facility has a very fast turning (round) system that is used to separate substance by forcing the heavier substances to the outer edge. In this, an object is kept in rotation around a fix axis and a very strong force is applied in perpendicular to the axis of spin. It can be used for the separation of fluids, gas or liquids based on their density. **Make & Model:** NEYA 16R, REMI, India Specifications/Features:

of -A programmable facility rotation time setting up and rpm continuous mode of -A high-speed rotational gear-up with timer facility both at maximum of 9 acceleration and de-acceleration levels -Ability to operate -Ability support maximum 10 programs under protection -mode -Ability to support automatic imbalance detection system

## **Applications:**

-Useful for separation of electrochemical material science, biochemical sciences and physical sciences

Available mode for use:
-Centrifuge mode

-Standby mode

#### **ENVIRONMENTAL CHAMBER**

This facility provides very large range of chamber testing capabilities including temperature and humidity. High and low humidity can be simulated and combined with temperature and altitude extremes for comprehensive real-world simulation of environments can be provided by this facility. It can perform stand-alone test for environmental effects on test specimens, as preparation of test specimens for further physical tests or chemical tests or/and as environmental conditions for conducting testing of specimens. The chamber can be used for testing and exposing products to various environmental conditions in controlled setting. а Make & Model: ELAB-120, **ELAB** Solutions, India Specifications/Features:

- programmable facility humidity conditions -A of setting up temperature and -Ability work based varying environmental conditions on constant or -Designed to simulate a specific environment or conditions--such as temperature, humidity -Specialized unit modelled for extremely cold environments down to -20°C or temperatures as high 120°C as
- -Ability to work on single setting/condition and as well as varying conditions based on 24 hours **Applications**:
- -Useful to model almost any environment, from the high arctic to the desert to the rainforest

  Available mode for use:

  -Current (Constant) mode
- -Time based (Varying) mode

#### **FUME HOOD**

This facility is a type of local ventilation device that is designed to limit exposure to hazardous or toxic fumes, vapours or dusts. It is a specially designed work facility to reduce the loss of expensive tempered air from the lab. It is equipped with auxiliary air plenum to induce added airflow at face opening of the hood.

Make & Model: ELAB-FMH, ELAB Solutions, India

## **Specifications/Features:**

-Uni-Flow		superstructure
-Access		panel
-Full	30°	viewing height
-Base		Cabinets
-Fire		extinguisher
-Air	flow	monitor
-Plumbing		fixtures
-Ероху	worl	surface
-Sash		stops
-External	gas	connections
-Optimum		strength
-Smooth		edges
-Flawless		finish

## **Applications:**

-Useful volatile to reduce or eliminate exposure to liquids, dusts, and mists -Use protect the from inhaling toxic to user gases product -Use to protect the or experiment -Use the environment to protect Available mode for use:

#### DC ELECTRONIC LOAD

This facility is a 2-terminal programmable DC electronic load designed for testing and evaluating a variety of DC power sources. The DC Load can present dynamically changing loads to the DC source with millisecond switching times. The DC Load can be remotely programmed via a serial interface (USB virtual COM). Versatile triggering options allow the dynamic load behaviour to be synchronized with other events.

Make & Model:-8510, B&K Precision Corp. CA, USA

## Specifications/Features:

-Constant current (CC), resistance (CR), voltage (CV) and power (CP) operation -0-120V/120A/600W

-Built-in transient generator

-Short circuit test
-Over-Current/Over-Voltage/OverPower/Over-Temperature Protection

-Battery testing mode

<sup>-</sup>Ventilation mode

-Flexible						trig	gering
-Remote			voltage			sensing	
-Low	minimum	operating	voltage	of	<	0.1	V
Applications	s:						
-DC		power	supply			testing	
-Characterization		of	rechargeable			bat	teries.
-Fuel		and solar		olar cell			test
-High			voltage			applic	ations
Available		mode		for			use:
-List			mode			ope	ration
-Battery test	ting mode						

## **AC ELECTRONIC SOURCE**

disturbances

AC ELECTRONIC SOURCE										
This facility is both a programmable AC source and a measurement tool. It is a fully programmable										
linear AC sources, capable of delivering a maximum of 300 VA through the universal line output										
terminals on the front and the output connector on the rear. The output can be varied from 0 to 300										
with	0.1		V	prog	rammin	g	resolutio	n.		
k K	<b>Model:</b> 9801	, В&	K Pre	ecision	Cor	rp. C	CA, US	Α		
s/Featur	es:									
300	0 V,	low	distor	tion	AC	power	sourc	е		
frequen	cy adjı	ustable	from	45	Hz	-	500 H	łz		
		phase		ang	<b>j</b> le		contr	ol		
le	voltage	an	d	frequency		limit	setting	js		
	PLD	а	nd	dir	nmer		simulatio	n		
	and	f	requency		swe	еер	mod	le		
USB	(USBTMC-c	compliant),	RS232,	LAN	and	GPIB*	interface	28		
PP/OTP	protec	tion	modes	and	key	lock	functio	n		
ac	cording	to	IEC61000-4	<b>⊦</b> -11	/	4-14	/ 4-2	28		
driver	and	soft	panel 1	for re	mote	control	availab	le		
	for		eva	aluating			transforme	rs		
for	evaluating	TRIAC	s, SCR	s and	d b	assive	component	ts		
for	evaluating	R&D,	service,	and	pre	-compliand	e testir	ıg		
		mode		1	or		us	e:		
rk	both a proces, cane front with  //Featur 30/ frequen  e  USB P/OTP according driver	both a programmab ces, capable of deline front and the outp with 0.1  Model: 9801  /Features: 300 V, frequency adju e voltage PLD and USB (USBTMC-0 P/OTP protect according driver and  for for evaluating	both a programmable AC sources, capable of delivering a more front and the output connects with 0.1  Model: 9801, B& Model: 98	both a programmable AC source and a medices, capable of delivering a maximum of the front and the output connector on the reservation with 0.1 V  Model: 9801, B&K Programmable AC source and the output connector on the reservation with 0.1 V  Model: 9801, B&K Programmable From 1	both a programmable AC source and a measurement ces, capable of delivering a maximum of 300 VA the front and the output connector on the rear. The output with 0.1 V programmable P801, B&K Precision Model: 9801,	both a programmable AC source and a measurement tool. It ces, capable of delivering a maximum of 300 VA through the front and the output connector on the rear. The output capable with 0.1 V programming Model: 9801, B&K Precision Conference:  300 V, low distortion AC frequency adjustable from 45 Hz phase angle and frequency PLD and dimmer and frequency swell (USBTMC-compliant), RS232, LAN and P/OTP protection modes and key according to IEC61000-4-11 / driver and soft panel for remote for evaluating for evaluating TRIACs, SCRs and percentage in the control of the control	both a programmable AC source and a measurement tool. It is a fully proces, capable of delivering a maximum of 300 VA through the universite front and the output connector on the rear. The output can be varied with 0.1 V programming  Model: 9801, B&K Precision Corp. Of the three of the following of the followin	both a programmable AC source and a measurement tool. It is a fully programmable ces, capable of delivering a maximum of 300 VA through the universal line output he front and the output connector on the rear. The output can be varied from 0 to 30 with 0.1 V programming resolution Model: 9801, B&K Precision Corp. CA, US (Features:  300 V, low distortion AC power source frequency adjustable from 45 Hz - 500 Heaville phase angle control of the control of		

-Sweep mode: for testing the efficiency of SMPS or capturing the maximum operating power requirements of the device under test

# Heating Ventilation and Air Conditioning (HVAC) Laboratory RADIANT COOLING LAB WITH THERMAL STORAGE

- -Cooling system that uses temperature controlled surfaces to remove sensible heat and cool the indoor space, primarily through radiation mode of heat transfer.
- -These systems use water to circulate through the coils embedded on the panels attached to the ceiling, wall or floor to create and maintain thermally comfortable indoor environment.
- -Dedicated outdoor Air system (DOAS) is required to provide conditioned air for ventilation and dehumidification.
- -This lab is fully automated and proper controls are provided to prevent condensation on ceiling panels and operate the system either with chiller or with cooling tower depending on the ambient wet bulb temperature.
- -Chilled water based thermal energy storage has been integrated with this existing cooling system.

## **Specifications:**

-Type	ot	therm	al	storage:			Sensible
-Thermal	Sto	orage	Capacity:	(	6		TRh
-Tank's	water	storage	capacity:		4000		liters
-No.		of	Та	nks:			2
-Tank	fabrica	ntion	material:	Milo	d		steel
-Corrosion	protection:	Fibre-reinforced	plastic(FRP)	coating	1	mm	thick
-Insulation	material/	thickness:	Polyurethane	foam/		70	mm

## **Applications:**

(AHUs).

- -Peak load shifting reduction -Cooling equipment size -Taking advantage ambient in the night improve of low temperature time to **Psychrometric** test facility:
- -Two air-tight well insulated test chambers are constructed and integrated with Air handling units

modular

dedicated

outdoor

air

svstem

(DOAS).

- -Proper instrumentation (accurate enough as per the prescribed standards) is done to measure the temperature, humidity, air velocity, differential pressure, flow rates, thermal energy, electrical energy etc.
- -Fully automatic test facility, able to create controlled atmosphere (temperature and humidity) using programmable logic controller (PLC) and supervisory control and data acquisition (SCADA) system.

## **Specifications:**

chillers

and

-2	AHUs:	1000	0	С	FM	&	2	.000		CFM
-2	Chillers:	5	TR	2	&	10	T	R		capacity
DOAS									Con	ponents:
-Enthalpy										wheel
-Desiccant										wheel
-Sensible										wheel
-Low	temperatu	re	&		high		tempera	ture		coils
-Indirect		evap	orative			cod	oling			unit
-Desiccant		whe	eel's			regene	ration			unit
-PLC				&						SCADA
-Control p	anels, VFDs, E	nergy r	meters,	BTU	meters,	Velocity	sensors,	T &	Rh	sensors.
Application	ns:									

This laboratory is being used to test the different air conditioning strategies for different climatic conditions and derive the most efficient cooling strategy for the respective climates depending on the energy consumption pattern and thermal comfort observed during the testing period.

## ADSORPTION CHILLER & EVACUATED TUBE COLLECTOR SET UP

Low grade thermal energy (heat) is required to operate the adsorption chiller -Chilled water generated from this chiller can be used in water based cooling system -Hot water required for regeneration of adsorbent (silica gel) bed can be produced from evacuated tube

collectors

(ETC)

tube			collectors			(ETC)
Specificati	ons		(Adsorpti	on		Chiller):
-Rated		capacity	<i>r</i> :	1	11	kW
-Rated			COP:			0.55
-Chilled		water		temperatur	re:	7-20°C
-Hot	water	temperature	required	for	regeneration:	60-90°C
-Cooling	W	ater	temperature		required:	10-35°C
-Operating		power	consum	otion:	1.3	kW
<b>Evacuated</b>			tube			Collector:
-No.		of		tubes	:	35
-Tube	structure	e: all	glass	double	tube	co-axial
-Glass		material:		Borosil	icate	3.3
-Outer		tube	diameter:		58	mm
-Inner		tube	diameter:		47	mm

-Tube		length:		2	100		mm
-Absorber			coating:				Cu/SS-AIN
-Average	heat	los	s:	<0.65		W/m2	K
-Buffer	tank		capacity:		1	000	liter
-Inner	tank	sheet:	Galvanized		iron	2.5	mm
-Coating:			Marine				paint
-Insulation:	PUF-	high	density		50	mm	thick

# **Applications:**

Make: Ambassador

The hot produced from ETC water can be used in two ways: chiller the -Operating the adsorption in summer season -Use the hot water for heating the space in winter season by circulating through the radiant floor/ceiling panels.

Private

Limited.

India

## **OASYS TWO STAGE INDIRECT/DIRECT EVAPORATIVE AC**

Coolers

ivialite. / tillik	Jacouaci		00	OICIO	Tivate			iica,	iliaia
Specificati	<b>ons։</b> -Տսր	ply		Air		C	FM:		1300
-Adiabatic			effi	ciency:		110	%		(upto)
-Power			rati	ing:		600			Watt
-Heat Exch	anger typ	oe: Indirec	t cool	ing module(	Polymer flocke	ed), Dir	ect coo	ling module	e( Cellulose
pad)									
-Blower:	Plug	type	b	ackward	curved	centri	fugal	single	blower
-Motor:	500	Watt	GE	Motor	(720/810/90	00	rpm	speed	variation)
-Outer		casing		materia	ıl:	Fibre-r	einforc	ed	plastic
-Duct	m	aterial:		22	gauge		galv	anized	iron
-Grill	ma	nterial:		mild	steel		pow	der	coated
-Water		sump	)		capacity:		4	0	liter

## **Applications:**

Two-stage indirect evaporative coolers are becoming popular for achieving low temperature cooling set-point below WBT at higher system level efficiency. These coolers can be used in humid climates also unlike single stage evaporative coolers.

## **INSTRUMENTS AND SENSORS**

Hands-on		trainin	g	facili	ities	availa	ble	on:
-Hydronic		(Ra	diant		heating	/Cooling)	5	system.
-Thermal	enerav	storage	system	(except	cooling	equipment	downsizing	test).

-Building			Manage	ement		Sys	tem	(E	BMS)		control.
-Unitary	air	con	ditione	· (Inv	erter	and	Non-inve	erter)	perform	nance	testing.
-Enthalpy	whee	l,	Sensibl	e whe	el an	d D	esiccant	wheel	perfor	mance	testing.
-Indirect		an	d	two	)	st	age	evap	orative		cooler.
-Solar	hy	brid		air	С	onditio	oner	perfo	rmance		testing.
-Different	design	of	radiant	ceiling	panels	with	automatic	conder	sation	control	strategy.
-Calibration	n of	2,	3,	4 wire	RTDs	and	d thermo	couple	tempe	rature	sensors.
-Fan perfor	mance	char	acterist	ics for di	fferent o	aeome	tries and co	onfigurat	ions up t	to 3000	CFM.

# Biofuel Laboratory GAS CHROMATOGRAPH

Gas chromatography is type of chromatography for separating and analysing gases and the compounds that can be vaporized without decomposition.

Make & Model: Trace 1110, Thermofisher Scientific, India

# **Specifications/Features:**

-Carrier gas: Helium -Detector: Thermal conductivity detector

# **Applications:**

-Analysis of biogas

-Percentage composition of Methane and Carbon dioxide

#### **DIGITAL BOMB CALORIMETERP**

Bomb calorimeter is a constant volume calorimeter used to determine the energy contained in a material by measuring the heat generated during its combustion. **Make & Model:** SABC-01, Span automation,

# **Specifications/Features:**

-Water equivalent test calculation calorific -Automatic measurement and of value /water equivalent 0.01oC -Temperature scanning resolution:

# **Applications:**

-Calorific value of biomass
-Calorific value of liquid fuel
-Fuel testing
-Explosive and propellent testing

-Thermodynamic studies

# **ORBITAL SHAKING INCUBATOR**

This facility prov	vides optimum	condition viz	z. temperature and	mixing, required	I for growth of
microorganism		in	cul	ture	media
Make			&		Model:
CIS	-	24	plus,	Remi,	India
Specifications/Fe	eatures:				
-RPM	range:	20	to	250	rpm
-Temperature	F	Range:	5	to	60°C
-Accuracy:					±5°C
-AC	voltage		supply:	220/230	V
-Maximum shakir	ng capacity: 9 f	lasks x 2000 m	nL; 15x1000 mL; 24x	x500 mL; 33x250	mL; 49X100 mL
-Platform		size:	580	x600	mm
Applications:					
-Incubation	of	samples	on	desired	temperature
-Incubation of cul	tures on desire	ed temperature	along with shaking	at desired rpm	

#### THERMAL CYCLER

THERMAL	. CYCLER													
Thermal of	cycler is us	ed to	am	plify t	he DN	NA throug	gh the	prod	cess of polyr	nera	se c	chai	n reaction	(PCR)
which	includes	th	ree	r	najor	step	s:	den	aturation,	anı	nea	ling	, elon	gation.
Make	&	N	∕lod	el: T1	00	Th	erma	I	Cycler,		E	3ioF	Rad,	USA
Specifica	tions/Feat	ures:												
-Sample	capacity	96	Χ	0.2	ml	tubes,	0.2	ml	tub-strips,	or	1	X	96-well	plate
-Maximur	m		r	amp			rat	e:		°C/	/sec	<b>)</b> :		4
-Average			rar	mp			rate			°C/s	ec:			2.5
-Tempera	iture						range	e:					4-	-100°C
-Gradient						raı	nge:						30-	-100°C
-Tempera	iture			(	differe	ential			range	:			1	-25°C
Application	ons:													
-Nucleic						acio	b						amplif	ication
-Gene				clon	ning				and				aı	nalysis
-Gene						expre	ssion						aı	nalysis
-Mutation	ıal												aı	nalysis
-Cycle se	quencing													

#### COD MULTIPARAMETER PHOTOMETER

Multiparameter photometer is a compact and versatile meter working on the principal of absorption, which is a typical phenomenon of interaction between electromagnetic radiation and matter.

Make & Model:HI 83399, Hanna instrument, USA

# **Specifications/Features:**

-Two measurement modes

• Absorbance

• pH/mV

-Absorbance range: 0-4

-pH range: 2 t0 16

-Temperature range: -20-120oC

## **Applications:**

-COD of wastewater

-NPK value

-Alkalinity

-pH

-Conductivity

-Ammonia concentration

## **UV SPECTROPHOTOMETER**

It uses light in the visible and adjacent ranges. The absorption or reflectance in the visible range directly affects the perceived color of the chemicals involved Make & Model: UV-1800, Shimadzu, Japan

## **Applications:**

-Photometric Mode: - It measures the absorbance or transmittance at a single wavelength or at

multiple (up to eight) wavelengths.

-Spectrum Mode: - It obtains sample spectra using wavelength scanning.

-Quantitation Mode: - It generates a calibration curve from standard samples, and uses it to

calculate the concentrations of unknown samples.

-Kinetics Mode: - It measures the change in absorbance as a function of time, and calculates

enzymatic activity values.

-Bio-method Mode: - It is capable of analyzing DNA and proteins using the several common quantitation methods including quantitation of DNA or protein using the absorbance at 260/230 nm

or 260/280 nm.

#### LAMINAR AIR FLOW CHAMBER

A laminar flow system is a vital concept in the control of particulate contamination. Laminar airflow is defined as air moving at the same speed and in the same direction, with no or minimal cross-over of air streams (or "lamina") Make & Model: Sanco, India

## **Specifications/Features:**

Horizontal Laminar Airflow Chamber:
-HEPA filters
-UV
-Stainless Steel Hood
-Acrylic fibre covers

## **Applications:**

-Media Plate preparation of -Isolation micro-organism -Sterile condition microbial molecular and techniques in media -Plating of

-Culturing of fungus and bacteria

#### **MUFFLE FURNACE**

It is a front-loading box type oven or kiln for high temperature applications. It is usually heated to desired temperature by conduction and convection from electrical resistance heater element.

Make & Model: Sanco, India

## **Specifications/Features:**

-Temperature Range: Room temperature to 700°C -Chamber size: 20x20x35 cm -AC voltage supply: 220/230 V

# **Applications:**

-Determination of volatile solid -Determination of ash content in biomass

-Biomass combustion

#### **HOT AIR OVEN**

Hot air oven is used in heating the sample at desired temperature and also removes moisture from the sample.

Make & Model: Sanco, India

#### Specifications/Features:

-Temperature Range: Room temperatureto 160°C

-Accuracy:				±4°C
-Chamber	size:		60x60x75	cm
-AC	voltage	supply:	220/230	V

## **Applications:**

-Total solid content measurement
-Samples heating
-Sample drying

-Glassware drying

# Renewable Energy Laboratory SOLAR RADIATION MEASUREMENT SYSTEM

This facility provides the Global, Direct and Diffuse solar radiations throughout the year.

Instrument Details:

-Razon + 180075, Kipp and Zonen, India -General Specification: SRMS (Pyrheliometer + Pyranometer)

## **Applications:**

-Measurement of the Global, Direct and Diffuse solar radiations

-Measurement of the altitude, zenith and azimuth angle of location

Technical Specifications:		
Specification	Pyrheliometer	Pyranometer
Response time	< 0.2 s	< 0.2 s
Spectral range	310 to 2700 nm	310 to 2700 nm
Zero offsets: - (a) thermal radiation (at 200 W/m²)	1 W/m²	1 W/m <sup>2</sup>
(b) temperature change (5 K/h)	1 W/m <sup>2</sup>	1 W/m <sup>2</sup>
Non-linearity (100 to 1000W/m²)	< 0.3%	< 0.3%
Field of view	5° ± 0.2°	180°
Slope angle	1° ± 0.2°	
Measurement range	0 to 1500W/m²	0 to 1500W/m²
Operating temperature range	-40°C to +80°C	-40°C to +80°C
Ingress Protection (IP) rating	67	67
Temperature response		< 1% (-20°C to +50°C)
Directional response (up to 80° with 1000 W/m² beam)		< 20W/m²

#### **SOLAR SYSTEM ANALYSER**

This facility is capable of measuring the power generation of photovoltaic modules.

Instrument

-9018BT,

Meco,

India

# **Applications:**

-Measurement of open circuit voltage, short circuit current, fill factor and electrical efficiency of PV module

Technical Specifications:	echnical Specifications:				
Battery Type	Rechargeable Lithium Battery (3400mAh)				
Battery Life	400 times of linear scan (1000V ~ 1V, 0.1A ~ 12A), 8 hours for standby mode				
Memory Size	512K Bytes (3980 Mod files or 320 REC files or 3980 PWR files or 3980 IRR files)				
AC Adaptor	AC 100 ~ 240V input, DC 15V / 1~3A output				
Dimension	260 x 158 x 64mm (approx.)				
Weight	1580 gm Batteries included (approx.)				
Operation Environment	50 ~ 50 , 85% RH				
Temperature	0.1% of full scale				
Coefficient	(<18 or >28 )				
Storage Environment	-20 ~ 60 , 75% RH				
0 ~ 1000V	±1% ±(1% of Voc ± 0.1 V)				
0.1 ~ 12A	± 1% ±(1% of lsc ±9mA)				

#### **BIPV TEST CHAMBER**

Building-Integrated Photo-voltaic (BIPV) Chamber is Double skin facade system which can reduce the energy consumption of HVAC system by operating under different ventilation modes.

# **Applications:**

BIPV system can be operated in different ventilation modes and air cavity width, depending upon different climatic conditions through which high energy savings upon energy consumption of HVAC system can be achieved.

#### **HOT WIRE ANEMOMETER**

This flow fluid chamber facility provides the of the in or the duct. Instrument **Details:** -SDL350, USA Extech,

-General Specification: Hot wire anemometer

# **Applications:**

-Measurement of mass flow rate of fluid and its temperature

Technical Specification	Technical Specifications:					
Specifications:- Air Velocity	Range	Resolution	Basic Accuracy			
m/s	0.2 to 25 m/s	0.01 m/s	± 5%			
ft/min	40 to 3940 ft/min	1 ft/min	± 5%			
МРН	0.5 to 45 MPH	0.01 MPH	± 5%			

#### **UNIVERSAL DATA LOGGER**

This facility offers the measurement of temperature of surfaces. Different types of thermocouples such as K-type, J-type etc and RTD can be connected to this datalogger for precisely measurement of temperatures.

Instrument Details:

-34972A, Keysight, USA

-General Specification: Universal data logger

# **Applications:**

-Measurement and log the temperature of system

### RADIATIVE AND CONDUCTIVE HEAT FLUX SENSORS AND DATA LOGGER

This facility are the radiative and conductive heat flux sensor which are used to attach on the inner side of indoor spacing of building. These sensors gives the amount of heat transfer into indoor spacing.

Instrument Details:

-ELAB-FMH , ELAB Solutions, French

-General Specification: Conductive and Radiative heat flux sensor with data logger

#### **Applications:**

-Measurement of the conductive and radiative heat flux ingress into BIPV test chamber through windows

Technical				Specifications:
-Response	Time:	≤	25	seconds.
-Sensitivity:	Higher	than	10	μV/W/m2
-Temperature	range:	-10oC	to	100oC

-Sensor Thickness: Less than 1 mm

-Sensor area: Less than 50 X 50 mm

#### **Softwares**

- 1. ANSYS
- 2. COMSOL Multiphysics
- 3. PVSyst
- 4. SPSS
- 5. eQUEST
- 6. SimaPro 8
- 7. TRNSYS
- 8. Transol
- 9. DesignBuilder
- 10. WAsP
- 11. LabVIEW
- 12. EnergyPlus
- 13. MATLAB
- 14. RETScreen

#### MATERIALS RESEARCH CENTRE

#### **About MRC**

In order to augment the infrastructure for advanced research and to attain excellence in innovative research in materials technology, a centre of excellence - Materials Research Centre, has been created under the able support and guidance of the competent authority. The Materials Research Centre (MRC) aims to harness the talent resources of MNIT for promoting interdisciplinary research in appropriate materials technologies. Besides catering to the research needs of the institutional faculty & students, the state of the art research facilities of the Materials Research Centre will also be extended to the scientists, faculty and researchers of other institutes as well as to private sector/industries.

#### **Our Mission**

Promotion of interdisciplinary research in areas of materials technology.

To make the center internationally visible by way of achieving excellence in cutting edge research.

Active collaboration with institutes and universities of national and international repute.

Enhancement of bilateral sponsored research activities in materials technology.

Evolution of means to encourage industrial participation in technology development and research in areas of mutual interest.

Augmenting consulting activities; taking up joint projects with industries on new technology research and innovation.

Catering to the need for a new and upcoming generation of material scientists for carrying out sophisticated experiments.

**Our Vision** 

The Materials Research centre envisions to emerge as research intensive centre for interdisciplinary research in frontiers of materials technology. It further envisions the creation and maintenance of appropriate ambiance entailing drives in research for the development of appropriate materials technology. The center aims at fostering the growth of demanding technology research of the day vis-à-vis creation of new knowledge pertaining to meaningful industry-institution interaction.

Being a centre for invention and innovation of materials science and technology, it contemplates thriving for excellence, knowledge creation & dissemination for useful economic activities, besides the creation of new generation scientist resources of the country to take the lead role in mastering the technology development activities across the globe. The Materials Research Centre of MNITJ will continue hybridization of newer and newer faculties of science and engineering in order that a true culture of cooperative and participative activities in material science and technology emblems the birth of real sense interdisciplinary entity.

#### NATIONAL CENTRE FOR DISASTER MITIGATION & MANAGEMENT

#### **Facilities**

# National Earthquake Testing Facility Strong Wall (Seismic Load Reaction Wall)

The system can apply pseudo-dynamic and quasi-static loads on the full-scale test specimen:

- (a) Buildings up to three storeys (10m),
- (b) Bridge piers up to 10m height,
- (c) Other structures, components and assemblages.
  - 1. Made of M45 Grade High Performance RCC
  - 2. L-Shaped Wall with through 80mm diameter holes (With MS sleeves) at 600mm pitch
  - 3. Structural floor footprint -19m x 9m
  - 4. Slab Dimension 25m x 12m

- 5. Electric overhead crane capacity 20/5 Ton
- 6. Wall Height 11m
- 7. Short Wall Thickness 3m
- 8. Slab Thickness 1m

# **LRB Base Isolation Testing Rig**

It can test Isolation devices and Bridge Bearings under biaxial loads

- 1. Vertical compression load capacity-12000 kN
- 2. Horizontal cyclic load capacity-3000 kN
- 3. Displacement Capacity- ±250mm

#### **Servo Valve Actuators**

Currently NETF has 3 Servo Valve Actuators-

- 1. Dynamic Actuator-I
  - 1. Capacity-1000kN
  - 2. Stoke- ±250mm str
- 2. Dynamic Actuator-II
  - 1. Capacity-500kN
  - 2. Stoke- ±250mm str
- 3. Static Actuator-II
  - 1. Capacity-1000kN
  - 2. Stoke- 400mm str

These Actuators are powered by a 250 lpm hydraulic power supply.

# **Structural Dynamics Laboratory**

**Horizontal Harmonic Shake Table Setup** 

# **Specifications**

- 1. Oscilloscope
- 2. Accelerometers
- 3. Transducers Conditioner
- 4. Shake Table
- 5. Single Storey Shear Frame
- 6. Type Cylindrical CAM
- 7. Capacity 30kg
- 8. Amplitude-0.5, 1, 2 & 10mm

**Seismic Wave Amplification and Vertical Shake Table** 

**Dynamic Vibration Absorber** 

# **Electro Dynamic Vibration Test System**

# **Specifications**

- 1. Displacement- 38mm
- 2. Maximum Payload- 150kg
- 3. Force Capacity- Sine = 600 kg(f)Random = 420 kg(f)
- 4. Frequency Range- 5-2000Hz

# Horizontal Non-Harmonic Shake Table Setup

# **Specifications**

- 1. Oscilloscope
- 2. Accelerometers
- 3. Transducers Conditioner
- 4. Shake Table
- 5. Three Storey Shear Frame
- 6. Type Cylindrical CAM
- 7. Capacity 30kg
- 8. Amplitude-0.5, 1, 2 & 10mm

# **Different Arrangement for Tests**

# **Softwares**

# **Computer & Structures, Inc.**

- 1. Perform 3D
- 2. SAP2000
- 3. ETABS

# Itasca Consulting Group, Inc.

1. UDEC

# SIMULIA Abaqus Software Bentley Academic SELECT

1. Bridge Analysis

OpenBridge Designer, LEAP Bridge Concrete, LEAP Bridge Steel, RM Bridge Advanced, RM Bridge Enterprise

#### 1. Building Design

OpenBuildings Designer (enabled with Energy Simulator and GenerativeComponents capabilities), OpenBuildings Station Designer (includes LEGION Simulator and LEGION Model Builder)

# 1. Offshore Structural Analysis

MAXSURF Enterprise, On-campus use only: SACS Marine Enterprise, SACS Offshore Structure Enterprise, MOSES Advanced, MOSES Enterprise

# 1. Structural Analysis and Detailing

STAAD.Pro, STAAD Advanced Concrete Design, STAAD Foundation Advanced, RAM Structural System, RAM Connection, RAM Elements, RAM Concept, MicroStran, ProStructures

#### Matlab 2014a & Simulink

Recent Research

Dynamic Energy Management in Smart Distribution Systems

The increasing number of renewable energy based Distributed Generators (DGs) and other kinds of Distributed Energy Resources (DERs) integrating into the distribution grids are making the system highly complex, and thus its operation and control becoming a challenge to the system operators. In the new scenario, the energy management problems become more challenging due to new attributes of smart grids. Moreover, the integration of DGs and energy storage systems (ESSs) in distribution networks introduces bidirectional power flow and allows power networks to operate as microgrids. The existing energy management systems of microgrids mostly consider the optimal utilization of power rather than pricing though the integration of DERs involves significant investments. The worldwide energy consumption has augmented histrionically in recent past decade and is being projected to increase due to industries, manufacturing, healthcare, household efficacies, populations, modernization, and transportation including widespread global deployment of EVs. Traditionally, generations has been engendered using fossil fuels or nuclear reactors, with disastrous consequences for the environment. Generating electricity from fossil fuels releases greenhouse gasses, which is one of the biggest environmental problems in the world today. Also, globally the carbon budget is finite and running out fast. World need a rapid transition from lowcarbon foot print even to net zero. Power outages are another serious events and, due to their large scale, cause financial losses in the millions in industry and commerce. Almost all the future power networks in the world requiring a self-healing capabilities for automatic preventive, corrective and restorative capacity that will not only address for management of power, outage, restoration but also provides reliability, availability and security to the grid.

# **Dr. Nitin Gupta**

# Dr. Nitin Gupta Deptt. of Electrical Engineering

Effect of MWCNTs incorporation into polypyrrole (PPy) on ammonia sensing at room temperature We reported the gas sensing properties of nanocomposites of polypyrrole ((PPy) and multi-walled carbon nanotubes (MWCNTs) made with two incorporation techniques i.e. ex-situ and in-situ polymerization. The pure PPy and PPy-MWCNT nanocomposites prepared by both techniques were characterized by FE-SEM, Raman and FTIR. The good dispersion was confirmed for the MWCNTs into PPy matrix prepared via in-situ technique. Further the gas sensing measurements of pure PPy and ex-situ synthesized PPy-MWCNT nanocomposite were carried out for the case of NH 3 at room temperature, and they revealed slight increase in response for PPy-MWCNT (1.5 wt%) sample. Then, different mass ratio of MWCNTs (0.5-3.5 mg) were incorporated into PPy matrix via in-situ polymerization and sensing towards NH3, H2, C2H5OH and CO2 was investigated. The in-situ prepared PPy- MWCNT (2.5 mg) composite showed superior sensing with 1.33-29.74% response for 5-200 ppm NH 3, 47/111 s as response/recovery time and high selectivity.

Dr. Kamlendra Awasthi
Deptt. of Physics

Language translation: Sanskrit to Hindi

Read more...

# Prof. Vineet Sahula Deptt. of Electronics & Communication Engineering

Multi-level 3DCNN with Min-Max Ranking Loss for Weakly-supervised Video Anomaly Detection Read more..

Dr. Deepak Ranjan Nayak

Deptt. of Computer Science & Engineering

A novel fuzzy clustering-based method for human activity recognition in cloud-based industrial IoT environment

Read more..

# Dr. Ashish Kumar Tripathi Deptt. of Computer Science & Engineering

Technological Revolutions in Smart Farming: Current Trends, Challenges & Future Directions Read more..

# Dr. Ashish Kumar Tripathi Deptt. of Computer Science & Engineering

Sustainability evaluation of service supply chains: a case study of an Indian hospital Read more..

# Dr. Divesh Kumar Deptt. of Management Studies

Conceptualisation of Sustainable Consumer Behaviour: Converging the Theory of Planned Behaviour and Consumption Cycle Read more..Dr. Divesh Kumar

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Electrochemical sensors for pesticide detection in real samples Read more..

# Dr. Himmat Singh Kushwaha Deptt. of Materials Research Centre

Hydrodynamic cavitation as an intensifying tool to produce Nanoemulsion Read more..

# Dr. Virendra Kumar Saharan Deptt. of Chemical Engineering

Student Engagement Estimation using Deep Learning from Streaming Visual Cues in Classroom/Online Environments

Read more..

# Dr. Kuldeep Singh Deptt. of Electronics & Communication Engineering

A regional case study for flow of Lead (Pb) and Chromium (Cr) through solid waste management system

Read more..

# Dr. Amit Kumar Deptt. of Civil Engineering

Indicators of wastewater treatment performance for safe and sustainable water reuse in India Read more..

# Dr. Amit Kumar Deptt. of Civil Engineering

Development of remedial orthosis for CTEV(Clubfoot)

Read more..

Dr. Harlal Singh Mali
Deptt. of Mechanical Engineering

Design and development of microchannel heat dissipation devices Read more..

# Dr. Harlal Singh Mali Deptt. of Mechanical Engineering

Development and Characterization of differently woven Carbon Kevlar hybrid composite with their modeling and analysis

Read more..

# Dr. Harlal Singh Mali Deptt. of Mechanical Engineering

Cognitive radio Networks

Read more..

# Dr. Ritu Sharma Deptt. of Electronics & Communication Engineering

Quantum Computing Networks

Read more..

# Dr. Ritu Sharma Deptt. of Electronics & Communication Engineering

Models for Local Energy Transactions

Research Projects @ MNIT Jaipur

**Research Projects** 

#	Department	Project Investigator	Title of the project
1	Electrical Engineering	Dr. Rohit Bhakar	Low carbon pathways for energy system planning and operation und aspects of flexibility from transport sector
2	Electrical Engineering	Dr. Rohit Bhakar	Blockchain based Multi-Layer Energy Management System for Sr

#	Department	Project Investigator	Title of the project
3	Management Studies	Dr. Shridev Devji	Catalyzing Economic Development Impact of Pradhan Mantri Mudra in the States of Rajasthan and Karnataka
4	Chemistry	Dr. Meena Nemiwal	Greener approach for sensing and removal of noxious pollutants in n wastewater
5	Mechanical Engineering	Dr. Amit Arora	Thermo-mechanical characterization of lac blends and development equipment for partial mechanization of bangle making process
6	Chemistry	Dr. Meena Nemiwal	Development of novel ferrocene-based metal organic frameworks (Month terrogeneous catalysts for sustainable organic transformations
7	Electrical Engineering	Dr. Man Mohan Garg	Modelling, Simulation and Hands-on Practice on Control of Pow Electronics Converters for Green Energy Applications
8	Management Studies	Dr. Shridev Devji	Development of attention based network for food hygiene manager
9	Computer Science & Engineering	Dr. Mushtaq Ahmed	Crop Yield Enhancement by Soil Sensing
10	Electronics & Communication Engineering	Dr. Amit Mahesh Joshi	iGLU Intelligent Glucose Measurement Device

# **Journal Publications @ MNIT Jaipur (7478)**

#### 2024

Sonal Rajoria, Manish Vashishtha, Vikas K Sangal, "Oxidative degradation of electroplating wastewater by an electro-Fenton process using GO/TiO2NTs electrode", Environmental Engineering Research 2024 DOI: <a href="https://doi.org/10.4491/eer.2023.056">https://doi.org/10.4491/eer.2023.056</a>

#### 2023

Umadevi Prasanna, Vijaya Kumar Kambila , Rajesh Cheruku , Krishna Jyothi Nadella , K. Venkatratnam Kamma , Manju V.V., " **Electrical, transport, and optical properties of a novel PVB-NaNO3 complexed solid polymer electrolyte thin-films for solid-state battery**" , Materials Today: Proceedings 2023 DOI: <a href="https://doi.org/10.1016/j.matpr.2023.04.187">https://doi.org/10.1016/j.matpr.2023.04.187</a>

Shashi Ranjan Pathak, Pawan Sharma, Harlal Singh Mali, Anup Malik, "Optimization of machining parameters during milling on glass fiber-reinforced textile composite", Optimization of machining

DOI: https://doi.org/10.1007/s41939-023-00204-6

Khan Abdulkarim Abdulquyyaum, Shreyas Tiwari, Rajesh Saha, Shandiul Hoque, "Sensitivity extraction of step shape double gate (SSDG) TFET biosensor considering non-ideal scenario", Engineering Research Express 2023 DOI: 10.1088/2631-8695/acf18a

Rajpal Singh Shekhawat, Madhu Agarwal, " [HTML] from sciencedirect.com Spent bleaching earth co-processing in cement kiln & its effect on physical properties of cement", Materials Today: Proceedings 2023 DOI: <a href="https://doi.org/10.1016/j.matpr.2022.09.038">https://doi.org/10.1016/j.matpr.2022.09.038</a>

Conference Publications @ MNIT Jaipur (5800):

#### 2023

Rishabh Dwivedi, Amitkumar Patil, Gunjan Soni and Gaurav Kumar Badhotiya, "a State-of-the Art Bibliometric Analysis of Intelligent Predictive Decision Support Systems", INTERNATIONAL CONFERENCE on ADVANCES in MANUFACTURING TECHNOLOGIES and APPLICATION of ARTIFICIAL INTELLIGENCE: ICAMTAAI 2021 by :AIP Publishing at Dehradun / 0-0 / 2023

Sonu Jain, Ritu Sharma, "Designing of Polarization Insensitive Microwave Absorber for WLAN Band Application", WAMS2023 by :IEEE at PDEU, Gandhinagar / 6 / 2023

Ravi Rakeshkumar Trivedi, Rohit Vijay, Satish Sharma, Parul Mathuria, Rohit Bhakar, " **Participation of DERs at Transmission Level: FERC Order No. 2222 and TSO-DSO Coordination**", 2023 IEEE PES Conference on Innovative Smart Grid Technologies Middle East ISGT Middle East by :IEEE at Abu Dhabi, United Arab Emirates / 1-5 / 2023

Aditi Choudhary, Prerna Jain, Ashish Prajesh, "Wind Power Forecasting Using Deep Learning Method: A Review", 2023 1st International Conference on Intelligent Computing and Research Trends by: IEEE at Roorkee, India / 1-6 / 2023

Geetha P., S. J. Nanda, R. P. Yadav, "A Chaotic Sailfish Optimizer for Accurate DOA Estimation in Automotive Radar", 2023 IEEE International Conference on Microwave, Optical and Communication Engineering by :IEEE at IIT Bhubaneswar / 1-4 / 2023

Gaurav Kansal, Rajive Tiwari, "A Comprehensive and Preferential Analysis of Demand Response Programs", IEEE IAS Global Conference on Renewable Energy and Hydrogen Technologies - GlobConHT by: IEEE at Male, Maldives / 1-6 / 2023

Sarath MK, Kapil Shukla, "A Cost Effective and Reliable BatteryManagement System for Electric Vehicle Applications.", International Conference on Renewable Energy and Sustainable E-Mobility 2023 by :IEEE at MANIT Bhopal / / 2023

Books/Chapter Publications @ MNIT Jaipur

#### 2023

Book Chapter" **4D printing for product development: State of the art and future scope** ISBN:9780323860116 published by - Elsevier Year 2023 Authors- Shamsher Singh, Harlal Singh Mali

Book Chapter "Role of photonics for the realization of future 6G communication systems Chapter 10, Book: 5G Wireless Communication System in Healthcare Informatics,1st Edition ISBN:9781032312194 published by - CRC Press (Routledge, Taylor & Francis Group) Year 2023 Authors- Kamal Kishor Choure, Manisha Prajapat, Ankur Saharia, Nitesh Mudgal, Manish Tiwari, Puspa Devi Pukhrambam, Ghanshyam Singh

Book Chapter" **A bibliometric analysis of research on tool condition monitoring** ISBN:9781003434849 published by - CRC Press Year 2023 Authors- Jeetesh Sharma, Murari Lal Mittal, Gunjan Soni

Book Chapter" A Cluster-Based Seismic Risk Assessment: Economic Loss Using GIS for Jaipur Sub-Urban Area ISBN:9789819914593 published by - Springer, Singapore Year 2023 Authors-Anand, V., Mahatab, M., Sharma, A., Raj, D., Jat, M. K., Sarkar, R. and Pal, S.

Book Chapter" **A Critical Review of Existing Building Regulations and Bye-Laws in Hilly Regions of India** ISBN:9789819914593 published by - Springer, Singapore Year 2023 Authors- Choudhury, P. D. and Raj, D.

Book Chapter" A critical review of mechanical-based post-processing techniques for additively manufactured parts ISBN:9781003288619 published by - CRC Press, Taylor &Francis Group Year 2023 Authors- Abdul Wahab Hashmi, Harlal Singh Mali, Anoj Meena, Shadab Ahmad, Ana Pilar Valerga Puerta, Maria Elizete Kunkel

Book Chapter" **A High-Speed Architecture for Lung Cancer Diagnosis** ISBN:ISBN 978-166-84-6525-7 published by - Book-Structural and Functional Aspects of Biocomputing Systems for Data Processing, IGI Global Year 2023 Authors- R. Ratnakumar, Shilpa K., S. J. Nanda

# **Research and Consultancy:**

#	Project Title	PI Name	Department	Funding Agency
1	Design of performance based concreate using sand reclaimed from construction & demolition wastes	Prof. Tarush Chandra Dr. Bhavana Tripathi	Architecture & Planning	DST NEW Delhi
2	Preparation of District Environment management Plan for Hanumangarh	Dr. Nand Kumar	Architecture &	District Environment Committee and District Collector Hanumangarh
4	Preparation of District Environment management Plan for Sikar	Dr. Nand Kumar		Environmental Committe District Collector Sikar
4	Preparation of District Environment Management Plan for Alwar	Dr. Nand Kumar		Environmental Committe District Collector Alwar
5	UK India Clean Energy Research Institute (UKICERI)	Prof. Jyotirmay Mathur	Centre for Energy & Environment	DST, Govt. of India ( Indo- UK)
6	Residential Building Energy Demand Reduction in India (RESIDE)	Prof. Jyotirmay Mathur	Centre for Energy & Environment	DST- New Delhi (Indo- UK)
7	Market Models for Local Energy Transactions	Dr. Rohit Bhakar	Centre for Energy & Environment	SPARC, MHRD
8	Identifying best available technologies for decentralized wastewater treatment and resource recovery for India: Saraswati 2.0	Dr Vivekanand	Centre for Energy & Environment	DST- IMRCD Indian-EU
9	Applied Research for Sustainable Energy in Bulidings	Prof. Jyotirmay Mathur	Centre for Energy & Environment	UGC -New Delhi

#	Project Title	PI Name	Department	Funding Agency
10	Design and thermal performance analysis of hybrid thermal management system for Li-ion battery packs for electric vehicles in arid/semi-arid Indian climatic conditions.	Prahhakar	Centre for Energy & Environment	SERB- DST, New Delhi

Research at MNIT Jaipur, is one of the focal point to achieve its vision of developing cutting edge technology to meet the current and future challenges of technological development. The rich experience and talents of the faculty, combined with their passion and dedication for research and development in their respective areas has created excellent results. The focus on research is not bounded to the faculty members in their laboratories of the Institute but is pervasive beyond it in classrooms and fields as reflected in its relevance and rigor in all academic programmes of the Institute. On-going research activity is the benchmark of any professional institute of repute.

**Ongoing Projects** 

#### MNIT NISP

- About NISP
- MNIT NISP Policy
- Formats
- Contact Us

A large number of R&D activities are being carried out by faculty members and students in several cutting-edge science and technology areas. However, most of these research outcomes do not get translated into commercial products, benefiting the society in general, due to several reasons including lack of interest in the industry in commercializing new and futuristic technologies and restriction on the Institute's employees to start entrepreneurship. Towards this end, MNIT Jaipur, in line with the best practices of other institutes of higher learning across the world, encourages interested faculty members to incorporate companies to engage in the businesses, that are direct result of the research and development activities of the faculty member of MNIT Jaipur, be on the board of such companies in the capacity of a Director, Chairman, Promoter or any such role, subject to the terms and conditions of this Policy. The document draws from practices adopted by The National Innovation and Startup Policy 2019, Ministry of Education (MOE) Government of India.

Intellectual Property (IP) & Technology Transfer (TT) Cell

- About IPTT
- Institute IPR Policy
- Formats
- List of Patents for Licensing

- Useful Links
- Contact Us

Growth of Intellectual Property Rights (IPR) and Technology Transfer (TT) activities in the Institute is the need of the hour in Deanery of R and C as per NIT statute. These activities not only have high weightage in institute rankings but takes the Institute on Sustainability Route. Institute Intellectual Property (IP) & Technology Transfer (TT) Cell under Deanery of R&C, facilitates the Patent filing and Technology Transfer of the technologies developed by the faculty and students.

Other than helping inventors Patent filing and Technology Transfer the cell works on Institute's IPR Policy and empanelment of Patent Attorney.

IP&TT Cell, also facilitates the MNIT Students and Faculty to take their technologies to incubate at MIIC and enhance their technology readiness level for better commercial worth and enhancing the sustainability of the Institute.

Unnat Bharat Abhiyan - Regional Coordinating Institute

#### About Us

- MNIT as RCI
- Our Achievements
- Area of Action

Malviya National Institute of Technology, Jaipur is one of the premiere 31 NITs in the Country. It was established with a vision to create a center for imparting technical and scientific education. The institute aims at conducting cutting-edge research in the emerging and established fields of sciences, technology, and Social Sciences. Recently, MNIT, Jaipur was ranked second among the Engineering Institutions in Rajasthan. The College was established in 1963 as a joint venture of the Government of India and the state government, Rajasthan. The college was awarded the status of National Institute of Technology in 2002. In 2007, the Act of Parliament proclaimed the college as Institute of National Importance. The Institute is fully funded by the Ministry of Education, Government of India. Since its inception, over 12,000 students have graduated from MNIT, Jaipur in various disciplines including engineering, Physical Sciences, Management, and Humanities & Social Sciences. The Alumni of the institute are working as scientists, technologists, managers, and entrepreneurs. There are several alumni who are contributing to the transdisciplinary fields and are contributing through administrative services and social sector services. MNIT, Jaipur through its Alumni network and student resources is contributing significantly to the building of the nation and society.

# Welcome to International and Alumni Affairs, MNIT Jaipur

#### **PreviousNext**

#### **About Us**

The Dean International Affairs and Alumni Affairs Office deals with International and Alumni activities of MNIT Jaipur in order to promote international and intercultural exposure among faculty & students and to forge a life-long and mutually beneficial relationship with the Alumni to serve them and to work together to make this world a better place for future generations. The role of Dean International and Alumni affairs office is to:

- 1. To promote relationships between foreign universities/institutions and MNIT Jaipur, to define the scope of such relationships through appropriate Memorandum of Understanding (MoUs) with a focus on Student Exchange, Faculty Exchange and Joint Research. The central idea of international tie-ups with leading universities and establishments across the globe is to facilitate professional-education partnerships thus providing opportunities for exposure to global and state of art technologies and trends.
- 2. To promote exchange programs for students through Student Exchange Agreements with partner institutions where students are encouraged to participate in course work and/or research work, thus giving them international exposure and the opportunity to imbibe and learn from global work cultures. Our students have travelled to places like Canada, Taiwan, Germany, Japan and USA as a part of such exchange programs and assists students with the application and visa procedures.
- 3. To foster and strengthen the bond between alumni, students, and the institute by leveraging the relationships for an effective Outcome for the benefit of all MNIT's Fraternity and the Society.

# **Activities of Dean (International and Alumni Affairs)**

- 1. Facilitating international and national collaborations
- 2. Enabling faculty and student exchanges
- 3. Developing an ecosystem for bilateral projects
- 4. Building suitable and meaningful collaborations with reputed institutions across the globe
- 5. Promoting joint Ph.D. /Master's degree supervision with international partners
- 6. Strengthening and .Translating the relationship with our Alumni with an aim to grasp latent possibilities into effective and actual benefits for the individuals, society and nation

#### Alumni Awards 2022

The Alumni Awards 2022 Ceremony was organised by MNIT Jaipur on December 24, 2022 at Neeti Sabhagar, MNIT Jaipur. Dr R.K. Tyagi, Honourable Chairman, Board of Governor, MNIT Jaipur, Prof. N.P.Padhy, Director, MNIT Jaipur, Prof. Rakesh Jain, Dean International and Alumni Affairs, MNIT Jaipur, Prof. Ajay Pal Singh Rathore, Sh. Vishwas Jain and Sh. Avinash Kumar Agarwal welcomed the esteemed alumni present.

The Alumni Awards 2022 Ceremony was organised by MNIT Jaipur on December 24, 2022 at Neeti Sabhagar, MNIT Jaipur. A total of 17 awards were given by MNIT Jaipur to their distinguished alumni and they were classified into five different categories. MNIT Lifetime Achievement Award: Ashok Belani (1982 batch), Mahavir Punia (1973 batch), Shyam Lal Uttam (1971), T. Sarangarajan (1982), Satish Kumar Agarwal (1983). Distinguished Alumni Award: Prof. Ashok M. Raichur (1990), Prof. Shekhar Bhansali (1987), Manoj Joshi (1987), Nitin Gupta (1984), Rajat Agrawal (1991), Mahesh Singhi (1986). Prof. V Srinivasan Memorial Award: Amrit Lal Meena (1987), Samir Borade (1986). Young Achiever's Award: Megha Sharma (2005), Rakesh Gupta (2011), Rupesh Kumar Mishra (2016). Outstanding Service Award: Shailesh Patni (1986). The hard work and dedication of alumni towards their work makes the Institute and society feel proud of them. They have set an outstanding example for the coming generations through their commitment to excellence. The alumni shared various experiences which was a source of great motivation for all.

#### **International Students**

International students are welcome to MNIT Jaipur through any one of the avenues (as per eligibility) listed as follows:

# 1.Direct Admission Student Abroad (DASA)

DASA stands for Direct Admission of Students Abroad and is an initiative by the Government of India (GOI) for Foreign Nationals, NRIs (Non Resident Indian), PIOs (Person of Indian Origin) & Overseas Citizen of India (OCI) only.

DASA Admission Website: www.dasanit.org

#### 2. Ministry of External affairs (MEA) Admissions

The academic eligibility and required documents for candidates applying through MEA will be at par with the candidates offered admission through DASA process. They are required to pay normal institute tuition fee and balance institute fee as per DASA. The candidates will be offered admission letter for an Academic session by the MEA on MEA quota seats (if any).

Website: <a href="https://www.mea.gov.in/">https://www.mea.gov.in/</a>

#### 3.Indian Council for Cultural Relations (ICCR) Admissions

MNIT Jaipur offers admission in UG and PG programs in Academic session under ICCR Category. Please visit ICCR website for more information and regular updates.

Website: <a href="https://www.iccr.gov.in/">https://www.iccr.gov.in/</a>

#### 4.Study in India

The Indian education system began with ancient scriptures thousands of years ago. It has now transformed into modern-day education imparted in the finest of institutions. The network of 42,000+ colleges and 1000+ universities have aided India to become an attractive education hub

for international students. The same richness of Indian higher education needed due focus and led to the birth of the idea of the Study in India programme.

Website: <a href="https://studyinindia.gov.in/">https://studyinindia.gov.in/</a>

**Silver Jubilee Scholarship Scheme (Nepal):** Under SJSS, admission is provided by the Embassy of India, Kathmandu to Nepalese candidates for Engineering, Agriculture, Medicine and Para-medical courses in Indian Universities and Institutions. <a href="https://www.indembkathmandu.gov.in/page/scholarships-forms/">https://www.indembkathmandu.gov.in/page/scholarships-forms/</a>

**Suborno Jayanti Scholarship (Bangladesh):** 1000 Suborno Jayanti Scholarships for students (ICCR: 500 seats) and officials (ITEC: 500 seats) of Bangladesh were announced during Prime Minister Modi's visit to Bangladesh on 26-27 March 2021, to attract best and brightest talents, by making these scholarships aspirational for the applicants, and provide important opportunity to promote synergies between India and Bangladesh under India's New Education Policy. <a href="https://www.sjsdhaka.gov.in/sjs\_index">https://www.sjsdhaka.gov.in/sjs\_index</a>

#### **Undergraduate Admission**

The admission to undergraduate courses is facilitated through the Joint Entrance Examination (JEE) only. Please visit JEE portal for further details.

# Postgraduate and Ph.D. Admissions

The students can be admitted in the following categories

- 1. Through GATE Examination (visit current website)
- 2. ICCR Scholarship (Government of India): <a href="http://iccr.gov.in/">http://iccr.gov.in/</a>

Candidates applying for admission to PG/PhD programmes under the categories 1 to 3 (listed above) should apply through the respective links/portals. Other candidates are required to submit their application through our online portal (see right part of this page). Applications sent directly by students without a sponsor may apply through categories 1 to 3.

# For admission related queries, write to <a href="mailto:ad.intaffairs.students@mnit.ac.in">ad.intaffairs.students@mnit.ac.in</a>

#### Accommodation

The Institute provide on campus boarding and lodging facility to all the regular students. The messes in the hostel are managed and regulated by "MNIT Mess Council".International students can avail the mess facility at student hostels.

# +91-9549891444

Contact:

#	Name of the Internship	Location	Timeline of submission of Application	Eligibility Criteria	
11.	Okinawa Institute of Science and Technology	Japan	Open till 15/10/2022	Pursuing Bachelors and Masters	htt
2.	CERN (The European Organization for Nuclear Research) : Summer Student Program 2023	Switzerland	Opens in November, 2022 till January, 2023 (Tentative)	Pursuing Bachelors and Masters	htt
3.	Institute of Science and Technology Austria: Summer Internship Program 2023	Austria	Opens in December, 2022 till February, 2023 (Tentative)	Pursuing Bachelor- or Master of Science only	htt
//	Lunar and Planetary Institute: Intern Program in Planetary Science 2023	USA	Currently Open till 12 December 2022	Pursuing Bachelors and Masters	htt
15	EPFL Switzerland: Summer Internship 2023	Switzerland	Beginning of November to 04 December 2022.	Pursuing Bachelors and Masters	htt
6.	ETH Zurich: Summer Internship 2023	Switzerland	Beginning of November to 15 December 2022.	Pursuing Bachelors and Masters (CS, Electrical, Physics, Mathematics)	htt
7.	MITCAS Research: Summer Internship 2023	Canada	Begins in Mid August, ends in November 2022	Pursuing Bachelors	htt
8.	Industrial Technology Research Institute : Global Internship Program 2023	Taiwan	Begins in December 2022 Tentatively	Pursuing Bachelors and Masters	htt
9	IPAM: Research in Industrial Projects for Students (RIPS) 2023	USA and Singapore	Begins in November 2022 Tentatively	Pursuing Bachelors in Mathematics or Computer Science	htt 20
10.	SPACE TELESCOPE SCIENCE INSTITUE: Space Astronomy Summer Program 2023	USA	Begins in December 2022 Tentatively	Pursuing Bachelors	htt
	SANTA FE INSITITUE : Undergraduate Complexity Research Internship 2023	USA	Begins on 20th October 2022 tentatively	Pursuing Bachelors or Masters	htt
12.	DAAD WISE 2023	Germany	Open till 13 October 2022	Pursuing Bachelors or Masters	htt dat
					1

#	Name of the Internship	Location	Timeline of submission of Application	Eligibility Criteria	
13.	KAUST : Visiting Student Research Program	Saudi Arabia	Application is accepted throughout the year, applicant has to choose the desired programs from the active internships.	Pursuing Bachelors or Masters	htt
14.	Shahstri Indo Canadian Institute	Canada	Open	Pursuing Bachelors or Masters	htt

Scheme	DASA	ICCR	MEA
Year			
2019-2020	20	03	00
2020-2021	17	00	03
2021-2022	13	00	02

#### **Related Links**

- <u>Home</u>
- <u>People</u>
- Alumni Affairs
- International Students
- <u>Internship opportunities</u>
- <u>International opportunities</u>
- Partnerships
- <u>International MoU's</u>
- National MoU's
- <u>Events</u>
- <u>Int'l Research Projects</u>
- <u>Joint Ph.D Supervised</u>
- Joint Publications
- <u>Faculty Visit/ Exchange</u>
- <u>Joint Conf./ Workshops</u>
- Student Visit/ Exchange
- Photo Gallery

# Internship Opportunities

List of upcoming Summer Internship programs for Undergraduate and Postgraduate

#	Opportunity Name	Application Timeline	Location	
1.	Kalam Climate	Please refer the website regularly	U.S.A	https://www.usief.org.in/Fulbright-Kalam-Climate-Fellowship.aspx
2.			U.K	https://www.chevening.org/fellowship/crisp/
3.	for	Please refer the website regularly	U.K	https://www.chevening.org/fellowship/gurukul/
4.	( hancellor	Open till 15/10/2023	Germany	https://www.humboldt-foundation.de/en/apply/sponsorship-programmes/german-chanc
5.	and Anne I	Open till 06/10/2023	U.K	https://www.nottingham.ac.uk/research/researchwithus/fellowships/nottingham/index.a 8_e8hu56R1dNyPaxrcnvyS81WYczjhTbjMnWwUiea-tGxoCua4QAvD_BwE
6.	by Fulbright	*Multiple opportunities, Please refer the website	U.S.A	https://www.usief.org.in/Fellowships-for-Indian-Citizens.aspx
7	Fellowship	*Multiple opportunities, Please refer the website	Germany	https://www.daad.in/en/
8.	Overseas Visiting	Please refer the website regularly	U.S.A	https://www.purdue.edu/india/research-and-partnerships/ovdf.php
9.		Please Refer the Website	Turkey	https://www.turkiyeburslari.gov.tr/shorttermprograms

#	Opportunity Name	Application Timeline	Location	
10.	Gates Cambridge Scholarship	From 4 september to either 5 December 2023 or 4 January 2024 (Dependent on course)	U.S.A	https://www.gatescambridge.org/apply/timeline/
11.	Hungaricum Scholarshin	It is probably to open in November - December	Hungary	https://apply.stipendiumhungaricum.hu/
12.		Open till 01- 11-2023	Canada	https://vanier.gc.ca/en/home-accueil.html
13.	Hennessy	Open till 11- 10-2023	USA	https://knight-hennessy.stanford.edu/admission/planning-apply/eligibility
14.	Grant	Please refer the website	Austria	https://oead.at/en/to-austria/grants-and-scholarships
15.	Singapore International Graduate Award (SINGA)	Open till 01- 12-2023	Singapore	https://www.a-star.edu.sg/Scholarships/for-graduate-studies/singapore-international-grad
116	SBW Berlin Scholarship	From November 15th to December 31st and May 15th to June 30th of each year	Germany	https://sbw.berlin/en/sbw-berlin-scholarship/
17.	Research	Open throughout year	Italy	https://www.unidroit.org/research-and-internships-2/
18.	Council	*Multiple opportunities, Please refer the website	UK	https://www.britishcouncil.in/study-uk/scholarships/great-scholarships
	1			

Opportunity Name	Application Timeline	Location	
AAUW International Fellowships	August to 15 November of	U.S.A	https://www.aauw.org/resources/programs/fellowships-grants/current-opportunities/inte
Abdulaziz	-	Saudi Arabia	https://dsa-scholarships.kau.edu.sa/Default-211995-EN
Mundus	the website	*Locations depends upon programme	https://www.eacea.ec.europa.eu/scholarships/erasmus-mundus-catalogue_en
Schwarzman Scholarship China	to 19 September	China	https://www.schwarzmanscholars.org/admissions/
		Switzerland	https://www.sbfi.admin.ch/sbfi/en/home/education/scholarships-and-grants/swiss-gover
Johnson Scholars	the website	U.S.A	https://www.jnj.com/wistem2d-university-scholars
Nehru	the website	U.S.A	https://www.usief.org.in/Fellowships/Fulbright-Nehru-Fellowships.aspx
Sweden Fellowship	the website	Sweden	http://www.asemduo.org/07_news/content.php?table=bbs_01&multi=bbs_news&idx=18
Friedrich Naumann Foundation	to 30 April and from 1October to 31 October of	Germany	https://www.freiheit.org/scholarships-friedrich-naumann-foundation-freedom
Nenru Doctoral Research	please refer the website	U.S.A	https://www.usief.org.in/Fellowships/Fulbright-Nehru-Doctoral-Research-Fellowships.aspx
	Name  AAUW International Fellowships  The King Abdulaziz Scholarship  Erasmus Mundus Scholarship  Schwarzman Scholarship China  Swiss Government Excellence Scholarships Johnson & Johnson Scholars Program  Fulbright- Nehru Fellowships  DUO- Sweden Fellowship Programme  Friedrich Naumann Foundation  Fulbright- Nehru Doctoral Research	Name  AAUW International Fellowships  From 1 August to 15 November of each year  The King Abdulaziz Scholarship  Erasmus Mundus Scholarship  Schwarzman Scholarship China  From 12 April to 19 September 2023  Swiss Government Excellence Scholarships  Johnson & Johnson & Johnson Scholars Program  Fulbright-Nehru Fellowships  DUO-Sweden Fellowships  Please refer the website regularly  Please refer the website regularly  Please refer the website regularly  Fulbright-Nehru Fellowships  From 1 April to 30 April and from 10ctober to 31 October of each Year  Fulbright-Nehru Doctoral Research  Fulbright-Nehru Closed, please refer the website regularly  Closed, please refer the website regularly	Name  Timeline  AAUW International Fellowships From 1 August to 15 November of each year  The King Abdulaziz Scholarship  Erasmus Mundus Scholarship  Schwarzman Scholarship China  Scholarship  From 12 April to 19 September 2023  Swiss Government Excellence Scholarships  Johnson & Johnson Scholars Program  Fulbright-Nehru Friedrich Naumann Foundation  From 1 April to 30 April and from 10 Ctober to 31 October of each Year  From 1 April to 30 April and from 10 Ctober of each Year  Fulbright-Nehru Doctoral Fulbright-Nehru Doctoral Research  Fulbright-Nehru Doctoral Research  Fulbright-Nehru Doctoral Research  From 1 April to 30 April and from 10 Ctober of each Year  Fulbright-Nehru Doctoral Research  Fulbright-Nehru Doctoral Research

#	Opportunity Name	Application Timeline	Location	
29.	Vice Chancellor's International Excellence Scholarship	December	New Zealand	https://www.waikato.ac.nz/scholarships/s/vice-chancellors-international-excellence-schol

International Opportunities

**Partnerships** 

# International Networks Shastri Indo-Canadian Institute

The Shastri Institute is funded by, and partners closely, with government bodies both in India and Canada. The aim is to further bi-national ethos through different programs, facilitating scholarly research and exchanges between Indian and Canadian Universities, Cultural organizations, Government Bodies and United Nations Millennium Development Goals. Shastri Institute is pleased to announce its programme for the year 2021-22. Based on the Institute's COVID-19 policy proposals can be submitted. Programmes seeking applications are as follows...

MNIT Jaipur has been enrolled as an active member of Shastri Indo-Canadian Institute (SICI) from 2016

The Scheme for Promotion of Academic and Research Collaboration (SPARC) aims at improving the research ecosystem of India's Higher Educational Institutions by facilitating academic and research collaborations between Indian Institutions and the best institutions in the world from 28 selected nations to jointly solve problems of national and/or international relevance.

Received three SPARC 2019 projects and applied 23 research projects under The Scheme for Promotion of Academic and Research Collaboration (SPARC) -2020

The Science & Technology International Cooperation Division of DST has the mandated responsibility of (i) negotiating, concluding and implementing S&T Agreements between India and other countries; (ii) providing interventions on S&T aspects in international forums.

International Research Projects

		Sanction	Na
Project Name	Funding Agency	Amount	Inte
Removal of Heavy Metals from Groundwater and Industrial Effluents by Activated Carbon Prepared from Waste Agricultural Biomass	Shastri Indo Canadian Institute	10,00,000	Interna
UK India Clean Energy Research Institute (UKICERI)	DST, Govt. of India(Indo- UK)	1,02,02,000	Interna
Biogas for the people: sustainable utilization strategies in India and Austria for agricultural, agro- industrial and municipal residues utilization for robust biogas production process	DST- New Delhi (Indo- Austria)	8,90,000	Interna
Residential Building Energy Demand Reduction in India (RESIDE)	DST- New Delhi(Indo- UK)	1,19,68,000	Interna
Modeling a combinatorial approach for design of steel with ultrahigh strength and toughness	SPARC, MHRD	66,34,213	Interna
Cooprative Micro Grids Intergratedd Smart Electric Transportation Systems (CMGISETS): Coordinated Technology for Seamless Energy Management	SPARC, MHRD	96,99,515	Interna
Market Models for Local Energy Transactions	SPARC, MHRD	88,99,653	Interna
Nitrogen and oxygen containing heterocycles in the synthesis of drugs - from research to practice	Perm State University, Russia	6,57,718	Interna
Identifying best available technologies for decentralized wastewater treatment and resource recovery for India: Saraswati 2.0	DST- IMRCD Indian-EU	85,90,800	Interna
Thermoelectric Properties of Mg2(SiSn) and SiSn alloy with Trivalent and Pentavalent Doping	India-Taiwan S&T cooperative programme (CFP)	25,00,000	Interna
Design and Development of Nanostructured ZnO Film Based Piezoelectric Devices for Energy Harvesting Applications.	India – Austria scientific- technological co-operation	5,50,000	Interna
Modeling and characterization of Lithium Niobate based optical devices using surface geometric techniques for their applications in Integrated Optical Circuits (IOCs).	India-Ukraine inter-governmental science & technology cooperation program		Interna
Modeling and implementation of free space optical transceiver for next generation optical communication applications	India-Egypt scientific cooperation program	6,24,000	Interna
Evaluating Smart Phone-Based Fingerprint Recognition Technologies for Rural Population	Melinda Gates Foundation through MSU, USA	\$10000.00	Interna
Design and Development of Micro-structured Optical Components	India-Japan cooperative science programme (dst-jsps) joint	4,56,000	Interna

Student Visit/ Exchange

for Photonic Integrated Circuit (PICs) applications

# Student Exchange/ Internship

programme (dst-jsps) joint

research project

4,56,000

MNIT to Taiwan: One MNIT student visited Taiwan University for internship in July 2017.

MNIT to Portugal: One MNIT student visited Portugal University for internship in July 2017.

MNIT to Japan: One MNIT student Ms. Viddhi Mohan Sharma visited Japan for Internship as a part of JENESYS 2016 a Japan-SAARC Network Programme by the Embassy of Japan.

MNIT to Germany: Two MNIT students Mr. Shivam Gupta and Ms. Sakshi Chaudhary visited Germany for Internship in 2017 under DAAD Scholarship.

**MNIT to Canada:** Two Students Mr. Sudeep Sarma and Mr. Bharat Bagherwal selected and visited Canada under the SURI Programme of University of Saskatchewan in 2017

**MNIT to South Korea:** One MNIT student Mr. Tushar Mani Agarwal was selected and visited South Korea under the Youth Delegation Programe of Ministry of Youth Affairs and Sports, Government of India in 2017.

**MNIT to China:** One MNIT student Mr. Aditya Sharma was selected and visited China under the Youth Delegation Programe of Ministry of Youth Affairs and Sports, Government of India in 2017.

**MNIT to Russia:** One MNIT student Mr. Shivam Gupta Visited Russia under the Youth Delegation Programe of Ministry of Youth Affairs and Sports, Government of India in 2017.

**MNIT to Switzerland:** One PG student of MNIT, Ms. Divya Saini was selected and visited Switzerland under the Summer student program-2017 at CERN (European Organization for Nuclear Research) at Geneva, Switzerland.

**USA to MNIT:** A team of 5 students each visited MNIT Jaipur in 2017 for research work.

Germany to MNIT: Two students visited MNIT for Internship from Germany

**Tunisia to MNIT:** One student from Tunisia visited MNIT in 2017 for the internship.

**MNIT to Japan:** Two Students Ms. Pooja Kumari and Ms. Khushbu Sharma, visited Hiroshima University, Japan, under MOU to complete the objectives of her thesis work from 22nd Oct., 2017 to 30th Jan 2018.

**MNIT to Japan:** Student Ms. Pooja Kumari, visited Hiroshima University, Japan, under MOU to complete the objectives of her thesis work from 5 July 2018 to 30 Aug. 2018.

**MNIT to Japan:** Student Ms. Pratibha Pal, visited Hiroshima University, Japan, under MOU to complete the objectives of her thesis work from 06 Dec. 2018 to 14 Dec. 2018.

**MNIT to Canada:** Four Students Mr. Shubhangi Agarwal , Ms. Bhavini Bhatnagar , Ms. Chandni Dewani and Mr. Sakshi Agarwal selected and visited Canada under the SURI Programme of University of Saskatchewan in 2019.

Joint Conferences / Workshops Organized

- 1. SPARC Sponsored Course on "INDUSTRIAL TECHNOLOGIES for RENEWABLE and ELECTRIC TRANSPORTATION SYSTEMS" in collaboration with Concordia University, Canada from 28th January-18th March 2022.
- 2. "SMART GRIDS: Future Intelligent Electricity Distribution Grids" from 4th-14th February 2022 in collaboration with Cardiff University, UK from 04 February-14 February 2022
- 3. SPARC sponsored workshop on "Issues and Challenges in Micro-Grids with Intermittent Sources from 21st Dec. to 25th Dec. 2020 in collaboration with UNSW Australia, Concordia University, Montréal and MNITJ.
- 4. SPARC course on "Evolving Energy Sector and Markets" from 20th March -16th May 2021 in collaboration with Cardiff University, UK and MNITJ.
- 5. SPARC Sponsored International Conference iCADMA 2020 was organized on 05-06 November 2020 in collaboration with TU Wien University, Austria and MNITJ.
- 6. Coordinator, National Short Term Course on GIAN course on Advances in Pipeline Transportation of Crude Oils by Prof. A.K. Mehrotra, University of Calgary, Canada at Malaviya National Institute of Technology, Jaipur, India from 02-06-2018 to 06-06-2018.
- 7. A Joint Indo-CANADIAN Symposium on "Materials, Energy & Environment" Organized by Materials Research Centre MNIT Jaipur in Dec 2016.
- 8. Anjali Jain, Ravi Dhabhai , AK Dalai and S.P. Chaurasia ,"Interactive Effect of Furfural , Acetic Acid and Vanillin on Ethanol Fermentation by S. Cerevisiae Y35" International Conference on Energy & Environment: Challenges and Opportunities for Industries by Indian Institute of Chemical Engineers at MNIT Jaipur / / 2019
- 9. Chaurasia S. P., Jain A., Dalai A.K ,"Bioethanol Production Using Pervaporation Membrane Bioreactor" 66th Canadian Chemical Engineering Conference by Canadian Chemical Engineers at Canada / / 2016.
- 10. Coordinator, National Short Term Course on GIAN course on advances in pipeline transportation of crude oils (Expert: Prof. A.K. Mehrotra, University of Calgary, Canada) at MNIT, Jaipur, India from 02-06-2019 to 06-06-2019.
- 11. Coordinator, International Short Term Course on (GIAN)Sustainable Fuels and Chemical Production using Novel Catalysts (Expert: Prof. A. K. Dalai) at MNIT, Jaipur, India from 28-01-2019 to 01-02-2019.
- 12. Coordinator, Online GIAN Advanced Course on Manufacturing and Processing of Advanced Metallic, Ceramic and Composite Materials (Expert: Prof. Rajiv Asthana, Robert F. Cervenka School of Engineering, University of Wisconsin-Stout, USA,) at MNIT, Jaipur, India from 14-03-2022 to 18-03-2022.
- 13. Coordinator, GIAN course on Circular Manufacturing System (Expert: Dr Sachin Mangla, Faculty of Arts, Humanities and Business, University of Plymouth, United Kingdom) at MNIT, Jaipur, India from 21-01-2022 to 25-01-2022.

### Faculty Visit/ Exchange

1. Dr. Neeta Nain was Short Term Scholar at the Department of Computer Science and Engineering, Michigan State University, Under Distinguished Prof Anil K. Jain from 25 August 2017 to 28 November 2017.

- 2. Prof. S.P. Chaurasia "Appointed as Adjunct Professor" in the Dept. of Chemical & Biological Engg. at University of Saskatchewan given by University of Saskatchewan, Canada Year 2016.
- 3. Dr. Ankur Jain (Associate Professor, Hiroshima University, Japan) from 21st Feb. 2018 24th Feb. 2018.
- 4. Prof. Takayuki Ichikawa (Professor, Hiroshima University, Japan) from 07 Dec. 2018 15 Dec. 2018.
- 5. Dr. Ankur Jain (Associate Professor, Hiroshima University, Japan) from 06 March 2019 08 March 2019.
- 6. Prof. Manfred Stamm in Oct. 2014.
- 7. Prof. Andreas Fery in Dec. 2016.
- 8. Prof. Andreas Fery, Head, Institute for Physical Chemistry and Polymer Physics in Dec. 2018.
- 9. Dr. Dietmar Appelhans, Head, Bioactive and responsive Polymers in Dec. 2018.
- 10. Dr. Amit Das, Group leader "Functional and Smart Material Concept in Dec. 2018.
- 11. Prof. Dalai from University of Saskatchewan in 2018.
- 12. Visit of Coventry Delegates (Prof. Richard Dashwood, Professor Carl Perrin, Dr Rohit Bhagat and Mr J J Nandi) in November 2019.
- 13. Visit of University of Saskatchewan (Dr. Peter Stoicheff, Ms. Kathryn Warden, Dr. Jim Lee, Dr. Meghna Ramaswamy, Dr. Peta Bonham-Smith, and Dr. Raj Srinivasan) in December 2019.
- 14. Visit of Prof. Ernst Kozeschnik, Technische Universität Wien, Austria in September 2019 under SPARC Project.
- 15. Visit of French delegate Mr. Pierre Fryssinet, Founder & CEO, Aeroboutique Inflight Retail in October, 2019.
- 16. Visit of Prof. Hemanshu Roy Pota, The University of New South Wales, (UNSW), Australia from 24 Feb 2020 to 11 Mar 2020 under SPARC Project.
- 17. Dr. Kamlendra Awasthi has visited Leibniz-Institut für Polymerforschung Dresden, Germany in June 2017 for the collaborative work for one month.

Books/Chapter Publications @ MNIT Jaipur

# 2023

Book Chapter" **4D printing for product development: State of the art and future scope** ISBN:9780323860116 published by - Elsevier Year 2023 Authors- Shamsher Singh, Harlal Singh Mali

Book Chapter "Role of photonics for the realization of future 6G communication systems Chapter 10, Book: 5G Wireless Communication System in Healthcare Informatics,1st Edition ISBN:9781032312194 published by - CRC Press (Routledge, Taylor & Francis Group) Year 2023 Authors- Kamal Kishor Choure, Manisha Prajapat, Ankur Saharia, Nitesh Mudgal, Manish Tiwari, Puspa Devi Pukhrambam, Ghanshyam Singh

Book Chapter" **A bibliometric analysis of research on tool condition monitoring** ISBN:9781003434849 published by - CRC Press Year 2023 Authors- Jeetesh Sharma, Murari Lal Mittal, Gunjan Soni

Book Chapter" A Cluster-Based Seismic Risk Assessment: Economic Loss Using GIS for Jaipur Sub-Urban Area ISBN:9789819914593 published by - Springer, Singapore Year 2023 Authors-Anand, V., Mahatab, M., Sharma, A., Raj, D., Jat, M. K., Sarkar, R. and Pal, S.

Book Chapter" **A Critical Review of Existing Building Regulations and Bye-Laws in Hilly Regions of India** ISBN:9789819914593 published by - Springer, Singapore Year 2023 Authors- Choudhury, P. D. and Raj, D.

Book Chapter" A critical review of mechanical-based post-processing techniques for additively manufactured parts ISBN:9781003288619 published by - CRC Press, Taylor &Francis Group Year 2023 Authors- Abdul Wahab Hashmi, Harlal Singh Mali, Anoj Meena, Shadab Ahmad, Ana Pilar Valerga Puerta, Maria Elizete Kunkel

Book Chapter" A High-Speed Architecture for Lung Cancer Diagnosis ISBN:ISBN 978-166-84-6525-7 published by - Book-Structural and Functional Aspects of Biocomputing Systems for Data Processing, IGI Global Year 2023 Authors- R. Ratnakumar, Shilpa K., S. J. Nanda Industry Institute Interaction (I3)

- About I3
- Faculty Coordinators

MNIT Jaipur believes that Industry-institute Interaction (I³) is a crucial driver of progress and innovation and recognizes the significance of fostering solid ties with industries to bridge the gap between academia and the real world. Through collaborative initiatives, internships, research projects, and industry visits, we provide students with practical exposure and industry-relevant skills. Likewise, industries benefit from our academic expertise, talent, and fresh perspectives. By promoting a symbiotic relationship, we aim to create a mutually beneficial environment where academia and industry work hand in hand to address challenges, drive economic growth, and shape the future. Together, we can unlock new opportunities and make a lasting impact. MNIT Jaipur is implementing Industrial Interaction in four phases: Interaction, Collaboration, Partnership, and Knowledge sharing

# MNIT Jaipur will offer to Industry:

- Research expertise and cutting-edge knowledge
- Access to specialized facilities and infrastructure
- Collaboration on innovative projects and problem-solving
- Access to a talented pool of students and graduates
- Help in skilling industry's current and futuristic manpower
- Development of customized certificate or post-graduation programs
- Consulting services on industry-specific challenges
- Collaboration on industry-sponsored research projects
- Access to academic publications and resources
- Contribution to industry standards and best practices

S. No	Project Title	PI Name	Co-Pl 1 Name	Co-P
1	Development of high entropy alloy	Dr. Rajesh Kumar Rai, Assistant Professor, Department of Materials & Metallurgy, MNIT Jaipur		
	Detection of trace elements using microsensor array in the Human Spaceflight	Dr. Vinay S. Palaparthy, Assistant Professor, Department of Electronics & Communication Engg, DAIICT Gandhinagar	Dr. Kuldeep Singh, Assistant Professor, Department of Electronics & Communication Engg, MNIT Jaipur	
3		Dr. Priyanka Harjule, Assistant Professor, Department of Mathematics, MNIT Jaipur	Dr. Basant Agarwal, Assistant Professor, Department of Electronics & Communication Engg, IIIT Kota	Dr. Ankush Vas Professor, Dep Electronics & C Engg, IIIT Kota
4	thermal expansion for dimensionally stable	Professor, Department of	Dr. Vikas Kukshal, Assistant Professor, Department of Mechanical Engg, NIT Uttarakhand	
5	, -	Prof. Kanupriya Sachdev, Professor, Department of Physics, MNIT Jaipur		
6	Developing a user-friendly Chatbot system as an interface for information extraction in Natural language			
7	Codes for High Speed Free-Space/Satellite	Dr. Amit Kumar Garg, Assistant Professor, Department of Electronics & Communication Engineering, IIIT Kota	Prof. Vijay Janyani, Professor, Department of Electronics & Communication Enggg, MNIT Jaipur	
8	multispectral image compression using	Dr. Anand Darji, Associate Professor, Dept of Electronics Engineering, SVNIT Surat	Dr. Amit M. Joshi, Assistant Professor, Dept of Electronics & Communication Engg, MNIT Jaipur	

S. No	Project Title	PI Name	Co-PI 1 Name	Co-P
9	Foam Filled Honeycomb Structures for	Professor, Dept of Mechanical	,	Dr. Amar Patna Professor,

# **Industry Collaborating to MNIT Jaipur will:**

- Engage guest sessions on industry-relevant domains
- Associate with the collaborative research project
- Offer Internships and Challenging Opportunities to students
- Fund R&D through Corporate Social Responsibility (CSR)
- Set up industry-supported faculty chairs
- Set up Centre of excellence / Sponsored labs at MNIT Jaipur
- Encourage Entrepreneurship

# **Expression of Interest**

Industry experts are invited to submit their expression of interest for taking guest sessions at MNIT Jaipur

Click here to submit expression of interest

Connect with us at coordinator.ii@mnit.ac.in

Regional Academic Centre for Space (RAC-S)

	Call for the Project Proposals		
	Click here for Research Areas in Space		
	Link for submitting a proposal		
Start Date of Online Project Proposal Submission		June (	03, 2
Last Date of Submission of Online Project Proposals		July 0	)2, 20
Newly Sanctioned Research Projects 2022-23 "			

# Newly Sanctioned B. Tech / M. Tech projects 2022-23

	S. No	Project Title			PI Nan	ne		Na	ame of
		•	formance	Associate	Neelima		<b>Kolhare,</b> rofessor,	1. Swarit N	ikhil E
1		optimization of Thin F Acoustic Wave resonators and filters	-IIM BUIK (BAW)	Department		Electronics	and Engg,	<ol><li>Pankaj</li></ol>	Dhor

S. No	Project Title	PI Name	Name of
3	for Ka band applications	Department of Electronics Engineering  SVNIT Surat  Dr. Saravana Prakash P,  Assistant Professor,	M. Durga Prasad M. Tech, 2nd yea Ankita Kumari Si 2nd year
4	Investigation of Efficient Deep Learning Techniques for Hyperspectral Image Analysis  Diode Heat Pipe for Electronics Cooling in Satellites and	Department of Computer Science & Engineering, LNMIIT Jaipur  Dr. Manjinder Singh, Assistant Professor,	Gaurav Niranjan, 4th B. Tech Udit Mathur,
6	Spacecrafts  Development of a novel method for the synthesis of printable CIGS ink for solar photovoltaic application	Department of Mechanical Engineering,  MNIT Jaipur  Dr. Kunal Jayprakash Borse,  Assistant Professor,  Department of Metallurgical and Materials	Adarı Karthık Vın
7	Additive Manufacturing of Carbon Fibers/Rice Husk Ash	<b>Dr. Rajendra Kumar Goyal,</b> Professor, Department of Metallurgical and Materials	Ms Priyanka Sin year

The Computer Centre, a centralized computing facility of the Institute since 1989, caters to the need of different academic departments and various sections of the Institute by providing and managing extensive computing & networking facilities to the Institute. To facilitate the use of the latest information technology in Institute's teaching, learning, research and administration; to provide an excellent network environment that facilitates the access and exchange of information; to put

Heat Sink

innovation in technology transfer; to assist the Institute in its mission; to enable faculty, staff and students to use the computer and network resources effectively and efficiently; and to aim to provide the best quality IT services in the region, the Computer Centre at MNIT Jaipur has continued to re-engineer the process of its service operations for increased productivity and better quality.

The new Computer Centre has been established at the first floor of Prabha Bhawan which was inaugurated by Prof. S.V. Raghavan on 19th October 2014.

The Centre is housing 565 PCs (including 120 Graphics Work Stations), placed in 11 computer labs.

# Computer centre remains open round the clock all 365 days.

#### **Facilities**

- Programming Lab
- Designing Lab
- Language Lab
- Software

#### **Programming Lab**

The Programming Labs are equipped with following Software:-

Lab	Total	
No.	PC	Deployment
1	6/1	Matlab 2014a & Simulink, Mathematica 12.0, Code Blocks C++, Apache OpenOffice 4.1.0, Java 1.8 Endpoint Antivirus 8.0 etc.
2	45	Matlab 2014a & Simulink, Minitab 18   Minitab Express, aspenONE v10, ANSYS Academic Resear Multiphysics, Code Blocks C++, Apache OpenOffice 4.1.0, ESET Endpoint Antivirus 8.0 etc.
3	88	Matlab 2014a & Simulink, GCC for C/C++ Programming, Netbeans 7.0, LibreOffice, ESET Endpoi
8	40	Dev C++, Building Design Suite Ultimate 2019 (AutoCAD, Inventor Professional, Revit), Apache C programming, Python, ESET Endpoint Antivirus 8.0 etc.
9	6/1	Matlab 2014a & Simulink, Building Design Suite Ultimate 2019 (AutoCAD, Inventor Professional, NetBeans 7.0, ESET Endpoint Antivirus 8.0 etc.
11	60	Dev C++, Code Blocks C++, Java, ESET Endpoint Antivirus 8.0 etc.
Total	361	

# Instructions regarding usage of Labs

All the students are advised to follow the following instructions strictly in the labs.

1. Student must enter his/her name and relevant details in the register while entering the Computer Centre.

- 2. Student must carry Institute Identity card while working at the Centre and shall show the same to the staff on demand.
- 3. Students are strictly prohibited browsing any obscene site or material.
- 4. A Student found working on a particular machine shall be responsible for all the contents in that machine.
- 5. While working at the Centre, students should remain quite, avoid loiter, gossip or playing computer games.
- 6. Consuming terminal time on social websites (including chatting etc.) in any form is highly unwanted. The students found indulging in such activities may be asked to leave the terminal as academic work is hampered because of such occupancies.
- 7. Students are strictly enjoined not to unplug or remove any hardware component in the lab.
- 8. Violation of any of the above instructions may lead to punitive action such as fine or the name of the student may be recommended to the Disciplinary Board for severe action.

All the students are requested to Co-operate.

(Dean, Digital Infrastructure and Services)

### **Planning & Development**

#### About

The Office of Dean (P&D) is meant for planning, construction, execution, maintenance, and up-keeping of the institute. The dedicated technical and non-technical staff under the aegis of the Dean (Planning and Development) is working round the clock for operation and maintenance of institute infrastructure.

#### Common Works Carried Out by Office of Dean (P&D):

- 1. Planning of new construction
- 2. Execution and monitoring of ongoing works
- 3. Building maintenance: civil and electricity
- 4. Operation and maintenance of lifts, HVAC, VRV, and fire-fighting systems
- 5. Operation and maintenance of solar photovoltaic systems
- 6. Horticulture and landscaping of the institute
- 7. Housekeeping of the campus
- 8. Sanitation and waste management

- 9. Security of the campus
- 10. Operation and maintenance of institute vehicles
- 11. Commercial space allotment

# Service Management System (SMS)

Welcome to the Service Management System (SMS) of the Institute. The key concept behind SMS is anytime, anywhere and timely solution to the complaints received. SMS is an important step towards digitization of facilities offered to campus residents. The key features of SMS are listed as follows:

```
    ✓ Online monitoring and tracking of complaints.
    ✓ Mobile-friendly interface.
    ✓ 24X7 live registration of complaints.
    ✓ Time-bound solution to complaints.
    ✓ Simple process to register the complaints.
    ✓ Unique complaint number to each complaint.
    ✓ Online monitoring of the status of the complaint.
    ✓ Provision for feedback.
```

# The complaints of urgent nature should be reported at 954965-0249.

# **Academy Training Programmes**

#### Programs organized

We have initiated five programmes in month of Jan-Feb 2016 (details available on website). The academy targets to train approximately 1600 persons per annum, teachers of various colleges/institutes and industry persons in the states of Rajasthan, Gujarat, territories of Daman & Diu and Dadara Nagar Haveli. The funding of ministry is available for first four years, and later the academies will be running with financial independence. The training of faculty members of various institutes would continue with launch of one week/two-weeks Academy training programmes and one/two days Workshops on emerging trends in Electronics & Information Technology and related areas. (indicative areas list attached)

- Currently offered Prog.
- FDPs Completed
- FDPs Planned & forthcoming
- Forthcoming Conferences/Seminars/Internships

# 4th International Conference on Data Science and Application (ICDSA 2023): July 14-15, 2023

#	Course Name	Principal Coordinating Academy	Jt-Principal Coordinator, MNIT Jaipur with others	Duration of progra
01.	Trends in Robotics & Automation	IIITDM Jabalpur	academy@mnit.ac.in	04 July-15 July, 202:
(1)	Additive manufacturing & 3D printing	IIITDM Jabalpur	academy@mnit.ac.in	18 July-29 July, 202:
03.	Cyber Security	MNIT Jaipur/NIT Patna	academy@mnit.ac.in	POSTPONED
04.	Android Programming	IIT Guwahati	academy@mnit.ac.in	POSTPONED
05.	Research methodology and authoring/reviewing Manuscripts	NIT Patna/MNIT Jaipur	academy@mnit.ac.in	25 July-05 August, 2
06.	Smart Healthcare Technologies: Opportunities & Challenges		academy@mnit.ac.in	25 July-05 August, 2
07.	Fundamentals of 5G & beyond wireless systems	IIT Roorkee	academy@mnit.ac.in	01 August-05 Augus 2022
W8.	Malware Analysis with data science	NIT Patna	academy@mnit.ac.in	01 August-12 Augus 2022
	From Zero to Chip Design Workshop using OpenPOWER cores (IBM)	MNIT Jaipur	academy@mnit.ac.in	22 August-02 Septe 2022
10.	Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB	MNIT Jaipur	academy@mnit.ac.in	08 August-19 Augus 2022
111	Curriculum Development in the Light of NEP 2020	IIITDM Jabalpur	academy@mnit.ac.in	08 August-19 Augus 2022
12.	MATLAB Programming	IIITDM Jabalpur	academy@mnit.ac.in	22 August-02 Septe 2022
13.	Medical Image processing	NIT Wrangal	academy@mnit.ac.in	22 August-02 Septe 2022

Course Name	Principal Coordinating Academy	Jt-Principal Coordinator, MNIT Jaipur with others	Duration of progra
Open source FPGAs	IIT Guwahati	academy@mnit.ac.in	22 August-02 Septe 2022
		Course Name Academy	Course Name Academy  Jt-Principal Coordinator, MNIT Jaipur with others  Open source FPGAs  IIT Guwahati academy@mnit.ac.in

Malaviya National Institute of Technology Jaipur along with Soft Computing Research Society (SCRS), New Delhi is going to organize 4th International Conference on Data Science and Application (ICDSA 2023) during 14th and 15th July in Hybrid mode. The ICDSA 2023 aims to bring together leading academicians, scientists, researcher scholars, UG/PG graduates from all over the world to exchange and share their research advancements. It targets to provide a state-of-the-art platform to discuss various aspects of Models and Algorithms, Signal and Image Processing, Data Science, Data Analytics in Communication and Data Science applications. The conference proceeding of the ICDSA 2023 will be published in SCOPUS Indexed Springer Book Series, 'Lecture Notes in Networks and Systems' (Approval Pending). Click here for website

### Internship cum online training programme on Building IoT Applications: Using Open Source

	Course Name	Jt- Coordinator	Jt- Coordinator	Duration of the programme	Brchui O
ļ	programme on- Building IoT  Annlications: Using Open	vash0001@ntu.edu.sg	Dr. Ashish Sharma ashish@iiitkota.ac.in 9549650767 (M)	Postponed	Brochur flyer) Call for participa board do /Apply C

Jointly organized Online Programmes in year 2022
Table-1- Programmes in Summers 2022 (Organized by all 7 Academies)
Common Flyer

Welcome to GIAN (Global Initiative of Academic Networks )

Govt. of India approved a new program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological excellence. capacity to alobal In order to garner the best international experience into our systems of education, enable interaction of students and faculty with the best academic and industry experts from all over the world and also share their experiences and expertise to motivate people to work on Indian problems, there is a need for a Scheme of International Summer and Winter Term. During the 'Retreat' of IITs with Minister of Human Resource Development Smt. Smriti Zubin Irani on 29th June, 2014 at Goa, it was decided that "A system of Guest Lectures by internationally and nationally renowned experts would be

evolved along with a comprehensive Faculty Development Programme not only for new IITs, IIMs, IISERs but also other institutions in the country.

#### DIRECTOR'S MESSAGE

institute.

Welcome to Malaviya National Institute of Technology Jaipur. Being one of the oldest NITs, the institute has a rich heritage of sixty years producing world class engineers, managers, architects and scientists.

Ranked 37th nationally in the NIRF ranking-2023, the institute offers learning opportunities for

undergraduate, postgraduate students, and researchers in various domains. Some of the brightest minds in the country get selected in this institute, as it stood at second position among all NITs based upon opening all India admission ranks in 2021-22, and is always among top five NITs based on average all India admission ranks. The students develop domain knowledge and skills during their courses of study, to come out as most sought after people for placement. The undergraduate and postgraduate students passing out from the institute are being selected by some of the world's and nation's best corporations, apart from gaining admissions to top universities across the world for their further studies. Having a lush green campus of over 317 acres within the heart of the city, the campus offers a safe and lively environment. A world class teaching infrastructure, state-of-art laboratories, quality accommodation, and responsive student support mechanisms welcome you at the campus. A hallmark of the institute includes one of the largest in-house incubation facilities in any institution across the country, where the students can live their dream to be CEO's of companies, and offer iobs to rather than being job seekers. people, The institute has a vision to impart education of international standards and conduct research at the cutting edge of technology. This is led by a dedicated faculty, trained at reputed universities across the world. High quality research facilities, an interdisciplinary work environment and close collaborations with the industry attract some of the brightest academic minds as faculty to the

The institute's alumni have contributed significantly to nation building over these years, and have been recognised internationally for their knowledge and leadership, and bringing visibility for the institute. They are always welcome to their second home, and be a part of its growth journey, as mentors, recruiters and philanthropists.

Just to share, the institute is a stone's throw from the airport, railway station and bus stand, connecting you to the world and your loved ones. Come, join this vibrant campus, to enjoy this journey of learning, and develop sweet lifetime memories in this heritage pink city.

# **Prof. Narayana Prasad Padhy**

Latest News/Notics:

Commonwealth Split-site Scholarship Awarded to Ms. Rohini Haridas, PhD Student in Electrical Engineering

<u>List of shortlisted candidates for various teaching positions [Advt. no: AES/MNIT/ESTT/2022/TEACHING/01 Dated 10.12.2022]</u>

Advertisement for the post of Deputy Director [Advt.No. AES/MNIT/ESTT/2023/03]

Applications are invited from eligible Indian Nationals for the post of Registrar [Advt.No. AES/MNIT/ESTT/2023/02]

Vacancies in other Institutions/Organizations

8th international conference on "Sustainable Energy and Environmental Challenges" from December 4th - 6th, 2023

#### **ADMISSION 2023-24**

The Joint Seat Allocation Authority (JoSAA) 2023 has been set up by the Ministry of Education [erstwhile Ministry of Human Resources Development (MHRD)] to manage and regulate the joint seat allocation for admissions to 118 institutes for the academic year 2023-24. This includes 23 IITs, 31 NITs, IIEST Shibpur, 26 IIITs and 38-Other Technical Institutes Funded Fully or Partilly by Central or State Government (Other-GFTIs). Admission to all the academic programs offered by these Institutes will be made through a single platform.

**JOSAA** 

**CSAB** 

**DASA** 

#### **CCMT**

#### **CCMN**

#### Is MNIT Innovation & Incubation Center is recognized by any Govt. department?

Yes, MIIC is supported and recognized by Govt. of India

TBI Scheme by Department of Science & Technology, Govt. of India

#### What does MNIT Innovation & Incubation Center provide?

- Co-working space
- Technical/business mentoring
- Market expertise
- Lab Facilities
- Networking
- Relevant Trainings & Workshops
- Meetings with entrepreneurs
- Specific support from partners
- Awareness about Govt relevant policies
- Dip-stick research

#### What are the major thrust areas for Incubation at MIIC?

MIIC extends incubation support to startups primarily but not limited to the following areas:

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- Product or Process design / re-design
- Material or Process innovation
- Information & Communications Technology

Incubation is provided for all irrespective of education qualifications or language preference

#### Is there a timeline to apply for incubation?

You can apply round the year.

#### Is there any application fees?

No, there is no application fees.

#### What's the tenure of incubation?

Incubation agreement is valid for a 2 years and it can be extended for one more year depending on business progress

#### I have an idea, can I approach the MIIC?

You can approach the Incubation Center for mentoring and feedback.

### I am a student, but want to start a startup. Can I do it?

Yes you can.

# Can the MIIC help me in forming a Company?

Yes, we can connect you with our impaneled Consultant, who can guide you about Company formation in detail.

# I am not from MNIT, but have a company. Can I get incubated at MNIT Innovation & Incubation Center?

Yes, MIIC is open for external Startups, provided they fulfill eligibility conditions.

# What are the charges to incubate at MIIC?

The Annual Registration charges if Rs.5000 and Security Deposit amount is Rs. 5000. The space charges are depending on the size of the room/space.

We've already raised funding. Can we still apply?

Yes.